MENTAL HEALTH SERVICES ACT

ALAMEDA COUNTY

FY 2019 - 2023

INNOVATION PLAN

Public Comment Period:

April 13, 2018-May 13, 2018

Send comments to ACMHSA@acgov.org

Alameda County Behavioral Health Care Services

MHSA FY 2019-2023: Innovation Program Plan Description

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Executive Summary

In 2017 Alameda County Behavioral Health Care Services (BHCS) engaged in a Community Planning Process (CPP) to develop its Mental Health Services Act (MHSA) Three Year Program and Expenditure Plan for FY 2018-2020. During that process BHCS staff provided updates and information on current MHSA programs and community members provided input on mental health needs and services, including new Innovation ideas, activities and programming. The community was able to provide input in three ways: 1) verbal input at one of the five large community forums, 2) verbal input at one of the 18 smaller focus groups and/or 3) written input through the Community Input Survey which was translated into Mandarin, Cantonese, Spanish, Farsi, Vietnamese and Korean. Additionally, the members of the Pool of Consumer Champions (Alameda County's mental health consumer group) outreached to and engaged with community members, including individuals who were homeless, to provide input through the MHSA surveys.

From the CPP, BHCS was able to: identify current gaps and needs; increase our understanding of the community's view of underserved groups; and learn about potential areas of innovation. Based on all of the CPP data the BHCS Systems of Care identified possible Innovation projects that have been vetted by MHSA staff based on whether they addressed the community priorities as well as other external factors such as rates of crisis, substance use trends, etc. The four Innovation projects listed in this Plan cover the areas of:

- The need for increased and alternative Crisis Services;
- Substance Use among the SMI and SED population, and
- Community Violence and Trauma.

In the area of crisis the community was very vocal about wanting alternative crisis services developed that assisted people in crisis who met as well as did not meet the mental health criteria for a 5150 hold. Community Survey data also show that "Persons experiencing a mental health crisis" were identified as the second-most underserved population (54%). Due to the need felt at the community input meetings and the external data on mental health crisis and 5150 rates in Alameda County, BHCS has developed a five year Innovation project to implement a *test of concept for how to improve the crisis system* through a collaborative approach and change in staffing models paired with technological support and transportation. This project is called: Innovation Project 1: Community Assessment and Transport team (CATT).

In the area of substance use during the recent community planning process, parents and consumers expressed significant concern about the impact of cannabis use on individuals experiencing mental illness. They expressed the need for new approaches to substance use, concerns about poly-pharmacy, and specific concerns about increased access to cannabis. The Community Survey data show that substance use/abuse was the third top concern identified for Youth/Transitional Age Youth during the planning process. Moreover, Alameda County's TAY triage project funded by SB82 kept daily records on TAY clients experiencing mental health crises. They estimate approximately 70% of youth had used cannabis within 24 hours before the onset of the crisis. For these reasons BHCS developed Innovation Project 2: Cannabis Policy and Education for Young Adults.

Community violence and trauma was ranked as one of the top three areas among all age agroups that

was “essential” for BHCS to address with MHSA funding. Because of this, two of the Innovation projects are focused in this area of trauma and resiliency/recovery. The two projects are: Innovation Project 3: Transitional Age Youth Emotional Emancipation Circles and Innovation Project 4: Introducing Neuroplasticity to Mental Health Services for Children.

For details on Alameda’s CPP and MHSA FY 18-20 Three Year Plan please go to www.ACMHSA.org under Documents/MHSA Plans or click here.

INNOVATIVE PROJECT PLAN DESCRIPTION

County: Alameda **Date Submitted** 4.13.18

Project Name: Community Assessment and Transport Team (CATT)

I. Project Overview

Many counties and cities struggle with developing a crisis response system that is efficient and effective – getting clients to the right services at the right time, without unnecessary use of first responder and client time, and in a respectful and non-stigmatizing manner. In Alameda, there have been a variety of efforts made to improve crisis response. But the impact has been limited – **Alameda has the highest rate of 5150 holds in California: People who do not qualify for 5150 holds are not successfully linked to planned services and continue to over-use emergency services; and first responders spend many hours addressing behavioral health related 911 calls that would be better served in a different manner.**

Alameda County proposes to test two primary strategies to improve the crisis response system:

1) A collaboration among core Alameda County Health Care Services Agency programs - *Behavioral Health Care Services, Emergency Medical Services, and Alameda Care Connect (Whole Person Care)* – as well as other partners – *911 dispatch, the County Sheriff's Office, city police departments, city health and human services, and other relevant services* - to ensure the crisis response system is more agile and flexible.

Participating partners will:

a. Provide the staff time, training, and support to ensure that in the moment client services are responsive. For example, keeping records up to date so the mobile crisis teams have current information about the client and available services.
b. Participate in an ongoing Continuous Quality Improvement process to ensure that system improvements are made in a timely manner, resulting in better outcomes.

Outcome: More responsive crisis services and timely systems improvements.

2) Combining a unique crisis transport staffing model with current technology supports to enable them to connect clients to a wider array of services in the moment.

a. A mental health provider and an Emergency Medical Technician in a van to provide mental and physical assessment and transport to a wide range of services.
b. Technological support, such as ReddiNet to provide current availability of beds and Community Health Records to provide up-to-date information about the client's physical and mental health history. This assists with connecting a client to the most appropriate service in the moment, especially if they are not on a 5150 hold.

Outcomes: Increase accuracy of assessments; transport to non-emergency services, resulting in more planned services for the clients; reduce the time law enforcement and ambulances spend on addressing psychiatric emergencies.

This project is beyond adding a discrete service to a challenged system, it is a *test of concept for how to improve the system* through a collaborative approach and change in staffing models paired with technological support. If successful, it will contribute to increased efficiency for the emergency system, more appropriate services for the client, and a model that other counties can adopt or adapt to significantly improve their crisis response system.

1) Primary Problem

In the United States between 2009 and 2014 the number of police encounters with individuals experiencing a mental health crisis increased 43-50%. In Alameda County, the primary means of addressing these encounters is for law enforcement officers to place the individual on a California Welfare and Institutions Code Section 5150 hold – a 72 hour involuntary hold for psychiatric evaluation. **The California Department of Health Care Services (DHCS) report on involuntary detentions for FY2015-16 shows Alameda County with the highest rates of 5150 detentions at 75.3/10,000 for children and 195.7/10,000 for adults. Of those on a 5150 hold transferred to the psychiatric emergency services unit (PES), 75-78% did not meet medical necessity criteria for inpatient acute psychiatric services.**

In Alameda, individuals on 5150 holds are generally transported by ambulance, rather than police vehicles, to reduce stigma, trauma and possible negative outcomes due to law enforcement involvement. In 2016, this resulted in 13,143 individuals on psychiatric holds being transported by ambulance. This represents 11% of all ambulance transports. **This is a very expensive approach to transport; diverts resources from life threatening emergencies; and leads to clients, law enforcement, and other responders experiencing lengthy wait times for ambulances.**

Those placed on a 5150 hold experience one of two options:

- In 2016, 56% were determined to require a medical clearance and therefore were transported to a medical emergency department (ED) before going to Psychiatric Emergency Services (PES). The wait times between a 5150 hold and formal mental health evaluation can be 12 hours or more.
- In 2016, 44% did not need a medical clearance and therefore were transported directly to the PES unit. The wait times from 5150 hold to a formal mental health evaluation can be two or more hours.

Common issues that result in unnecessary 5150 holds and/or long waits include:

- Law enforcement has limited options for responding to psychiatric crises;
- 5150 holds can only be discontinued by psychiatrists in designated facilities;
- Psychiatric crisis situations are usually not medical emergencies, and therefore are not prioritized by the ambulance transport system;
- Paramedics' scope of practice, as set by the state, only allow them to transport behavioral health clients to an Emergency Department (ED) or Psychiatric Emergency Service (PES) in Alameda;
- Wait times at EDs and PES are often long, and

- The number of agencies involved in responding to one client often leads to lack of coordination of care, and therefore unnecessary or inappropriate care.

Another limitation of the current system is that **individuals in a psychiatric crisis who are not eligible for 5150 holds receive essentially no services.** If a law enforcement officer has the capacity, they may provide information about resources, but the individual is left in place with no effective linkage to needed services. Unfortunately most counties are familiar with the cycle that leads to over-utilization of emergency services: **When an individual interfaces with an emergency service, they often do not get successfully connected to the appropriate planned services, resulting in repeated use of crisis services.**

There are many agencies that play a role in crisis response. In addition, a number of efforts have been made to improve the system, without achieving the level of success desired. This project hypothesizes that in order to effectively change the Alameda County crisis response system from one with the highest rates of 5150 holds to a model of efficient and effective response, a collaborative effort to support creative solutions is required.

a) Describe what led to the development and prioritization of the idea for your INN project

Alameda County stakeholders have consistently raised concerns about the high rate of inappropriate 5150 holds, the lengthy process for transport and engaging in resulting services, and the difficulty of getting clients to services if they are not assessed to qualify for a psychiatric hold. In the planning process for the most recent MHSA Three Year Program and Expenditure Plan "Persons experiencing mental health crises" were identified as the second most "underserved population" (www.ACMHSA.org under Documents/MHSA Plans).

In Alameda, the cities with the most 5150 transports are shown here:

5150 Hold Transports by Emergency Medical Services in 2017*

	Emergency Dept.	Psychiatric Facility	Total
Oakland	2762	2,537	5299
Hayward	754	588	1342
San Leandro	660	546	1206

**Berkeley is not included in this list, as it has a separate MHSA funding allocation.*

Increases in homelessness, marginally-housed individuals, and the opioid epidemic have put a tremendous strain on law enforcement, Emergency Medical Services (EMS), emergency departments, and psychiatric crisis services. **Various agencies have made efforts to improve the situation without achieving the level of success desired. This is clearly a "persistent, seemingly intractable mental health challenge" in Alameda that other counties also struggle with. At this point, Alameda County Emergency Medical Services, Behavioral Health Care Services, and others are actively coming to the table to address this.** In addition, Alameda County was awarded Whole Person Care funding for four years. The Whole Person Care effort provides a supportive context for this Innovation plan, but does not itself include a crisis services component.

2) What Has Been Done Elsewhere To Address Your Primary Problem?

Alameda County proposes to transform itself from the county with the highest 5150 rate, to one with a model psychiatric crisis response system that gets clients to the *right place at the right time.* In order to do this, a significant collaboration among various agencies will be required to design, support and effectively implement multiple strategies. A key strategy is combining a behavioral health provider and Emergency Medical Technician (EMT) with up-to-date technology and information in a non-emergency vehicle to provide mobile crisis assessment and transport. **Alameda has not been able to identify another program that uses this collaborative approach, staffing model, and technological access to increase the efficiency and effectiveness of their crisis response system.**

BHCS conducted internet and literature research into transport for persons experiencing a psychiatric crisis that included identifying existing models throughout the United States, understanding federal funding sources, and understanding local legal code (Appendix A: MET Recommendations). Based on that research, the development of a crisis response team that includes a behavioral health provider and an EMT was recommended for a number of reasons. EMTs have fewer restrictions than paramedics on where they can transport clients. A team of an EMT and a behavioral health clinician can assess a client's mental and physical health, transport in a non-emergency vehicle, and conduct procedures such as a TB screening – resulting in more potential dispositions for the client in a more timely manner than most team staffing models. Potential transport destinations go beyond an emergency department or psychiatric facility to include crisis residential, sobering centers, and other non-emergency behavioral health services.

An internet search on related literature provided support for the need for collaboration to support change in mental health crisis response systems, but indicated a lack of conceptual clarity, lack of client perspectives, and need for further research (Winters, S. Inter-professional collaboration in mental health crisis response systems: a scoping review. *Perspectives in Rehabilitation.* Jan 14, 2015).

In addition, BHCS research and county-to-county networking identified projects that provided insight into staffing and transport models. There have been a number of projects implemented addressing mobile crisis response, especially with SB82 funds. A few most relevant to Alameda's proposed model:

- San Diego crisis teams include a paramedic and behavioral health staff. Including an EMT on the team instead of a paramedic, as Alameda proposes, increases the disposition options the team has to address a client's need. San Diego's pilot project was specific to clients on 5150 holds, while Alameda's proposed project will include assessing and transporting clients *not* on holds.
- San Mateo developed a program to train paramedics in assessing patients in mental health crisis and placing 5150 holds. A single paramedic responds in an unmarked car with a barrier that can transport the patient to their PES or a local Emergency Department. The single paramedic can contact the psychiatrist at PES when consultation is needed. This program has resulted in fewer patients being placed on a 5150 hold, but they report the impact is limited due to the staffing model, as many situations call for more specialized mental health expertise.
- San Mateo also has a Crisis Collaboration that convenes quarterly. This collaboration includes BHRS supervisors, law enforcement, fire, EMS, hospitals, PES, Kaiser, community partners and others. Much of the focus is on educating providers about available services and when to refer to those services. Alameda proposes a more targeted collaborative that addresses systems improvement.

Alameda County has implemented a number of efforts to improve the crisis system of care:

- Crisis Response Program (CRP): In 1988, the CRP began providing short-term case management for adults with serious mental health diagnoses to reduce unnecessary hospitalizations – generally accessed through walk-in and appointments. In addition, teams of two (2) mental health clinicians provide mobile crisis response (not transport) in downtown Oakland Monday-Friday from 10:00 am to 8:00 pm.
- Transition Age Youth Triage (SB82): The Hope Intervention Program (HIP) provides crisis prevention services to TAY (16-24). HIP aims to reduce use of crisis services by addressing services gaps, including mobile outreach (not transport), developing individualized crisis support plans, targeted intensive case management and linkage.
- Mobile Evaluation Teams: Beginning in 2014, behavioral health providers have been teamed with police officers in Oakland to reduce unnecessary 5150 holds by having the behavioral health provider conduct the assessments. While it has had some impact on 5150's, it does not address transport. This INN project develops crisis teams that can transport individuals to a range of services, whether or not they are on a 5150 hold, increasing the likelihood individuals will get connected to needed services, and reducing the likelihood they will over-utilize emergency services.
- SB82 Proposal: BHCS recently submitted an application for the Investment in Mental Health Wellness Act Round 2 Triage funding. That proposal requests funds for a few discrete services to fill gaps in the crisis continuum, including expanding the existing Mobile Crisis Team, a Post Crisis Follow-up Team, Education and Consultation Hotline, and Transition Age Youth (TAY) Multi-Disciplinary Team (MDT) for TAY in Santa Rita jail. None of these services provide transport.

This Innovation proposal does not just provide a discrete service, it is a test of concept to improve crisis response through a collaborative approach and change in staffing models paired with technological support and transport. Before adopting this staffing model across the system, this INN project will allow for testing whether it improves the transport system, and how it does this. INN will also support the testing of a robust collaboration to ensure effective changes are implemented, since the model requires active involvement in systems improvement from multiple agencies.

3) The Proposed Project

a) *Provide a brief narrative overview description of the proposed project.*

Given that Alameda has the highest rates of 5150 holds, has implemented strategies to address this with limited results, and has some uncommon crisis system features– a PES not attached to an ED and a reliance on ambulance transports – it seems necessary to **develop an interagency collaboration to design, implement and support a crisis response system that reduces the rate of involuntary detentions and increases the efficiency and effectiveness of linking clients to needed services. This system would include an innovative combination of staffing, technology, and collaboration to maximize the options available to the mobile crisis response team when assessing and transporting clients to needed services.**

The CATT project will promote interagency collaboration among core Alameda County Health Care Services Agency programs - *Behavioral Health Care Services, Emergency Medical Services, and Alameda Care Connect (Whole Person Care)* – as well as other partners – *911 dispatch, the County Sherriff's Office,*

city police departments, city health and human services, and other relevant service - to develop a highly responsive and efficient mobile psychiatric crisis response system. A Senior Program Specialist will coordinate the collaboration to meet regularly throughout the project to design system changes; clarify each partner's role in implementation; ensure training, staffing and policies support the determined changes; ensure course corrections are made in a timely manner; and oversee program evaluation.

This collaboration will develop, implement, support and evaluate new components of the crisis system in order to achieve the desired outcomes. The two core strategies that will be implemented are:

1) A mobile crisis team comprised of a behavioral health provider and an Emergency Medical Technician (EMT) in a non-emergency vehicle. This staffing model enables assessment and transport for a broad range of dispositions (PES, CSU, sobering center, emergency departments, etc.). The staffing model, as well as the collaboration, will contribute to the team successfully accessing all available dispositions. The staffing model will provide the professional capacity to assess and refer to the dispositions. EMTs are able to transport to a wider range of destinations than paramedics, while also being able to conduct medical assessments and initiate medical requirements, such as TB screening, to assist with transition into services. Mental health clinicians can conduct assessments to determine the most appropriate behavioral health service. An unmarked non-emergency vehicle reduces stigma and increases possible transport destinations ambulances cannot transport to. The collaboration will help ensure the disposition sites efficiently and successfully receive the clients.

2) Technical support that provides the greatest capacity for the team. This includes:
   - ReddiNet: A web-based emergency communications system. Alameda has been using it since 2008 to track hourly bed availability for emergency departments and during multi-casualty incidents. The collaboration will work with ReddiNet to expand the system to include beds, appointments and slots in crisis stabilization units, crisis residential sites, sobering/detox centers, and other behavioral health services, as well as alerting providers when the psychiatric emergency services is on diversion. In addition it sends alerts to all EDs, ambulances, transport teams, and other pertinent agencies if Alameda's regionally dedicated PES or other behavioral health facilities are close to full. ReddiNet has been implemented in a number of counties in California, although likely they do not all use the bed capacity feature. Alameda BHRS aims to achieve full utilization of the bed capacity feature through this project's collaboration by ensuring all relevant partners participate and keep it up-to-date.
   - Video translation services: A program to provide a translator on screen.
   - Shared client records: In 2019, BHCS clinicians will have access to Community Health Records through Alameda's Care Connect (Whole Person Care), including physical and mental health history and information about providers engaged with client, as well as allowing them to add the current episode to the shared records. The EMT can maintain clinical records in the existing electronic Patient are Record that is used by 911 ambulance system. The collaboration will be essential to ensuring these records are updated, useful and accessible.

The project would provide services from 7:00 am until midnight, seven days per week – as those are the times when the large majority of 5150s are placed in Alameda County. Teams of one behavioral health clinician and one EMT will be deployed in unmarked vehicles fitted with appropriate technological capacities and safety features. Safety features include special seating for clients, a barrier between the driver and back passenger seats, customized locks and windows, locking storage cabinets, and other

modifications similar to the inside of a police vehicle. The services would be dispatched by the 911 system for behavioral health related calls. A police officer would arrive first to assess safety.

- By developing a strong relationship between the police department and BHCS, law enforcement can make it a practice to wait on making a determination regarding a 5150 hold until the crisis team arrives. This should reduce unnecessary 5150 holds.
- If a hold is appropriate the CATT can transport the client to PES or to an ED for medical clearance prior to PES. This should reduce the time law enforcement and ambulance staff spends on behavioral health calls.
- The CATT can also assess, refer and transport individuals *not on a hold* to programs such as a sobering center, crisis residential, or crisis stabilization unit. The EMT can complete an initial medical evaluation required before transport to the ED, PES or Sobering Center, as well as completing checklists that will streamline intake for programs such as crisis residential. Use of ReddiNet will help ensure there are services available before a client is transported. This should increase the ability to efficiently link clients not on a 5150 hold to services. Over time this should lead to an increase in use of planned services and reduction in use of emergency services. (ReddiNet will be expanded to include beds, appointments and slots available at crisis stabilization units, crisis residential sites, sobering/detox centers, and other behavioral health services, as well as when PES or emergency department go on diversion. In case services are at capacity, PES will always accept clients from the field.)
- Use of BHCS electronic records, as well as Community Health Records, will increase accuracy of assessments and continuity of care.

Initially CATT will deploy two vehicles to serve two communities in Alameda County. San Leandro is the city with the fourth highest number of 5150 holds in Alameda County (1,206) (Appendix B: EMS 5150 Transports by City). It does not have an alternative crisis response, just police and EMS. San Leandro has committed to participation (letter of support pending). Hayward is the city with the second highest number of 5150 holds in Alameda County (1,342). It also does not have an alternative crisis response in place. Hayward has committed to participation (letter of support pending).

Piloting this project in these two communities will allow for testing out systems and ensuring they are functioning well before expanding to a more complicated environment. After 18 months, the project will expand to Oakland (letter of support pending). Oakland is the city with by far the highest number of 5150 holds (5,299). It has Mobile Evaluation Teams and a Crisis Response Program, neither of which provide transport. In order to see if the CATT project can have a significant effect on the overall crisis response system, it is essential to test it in Oakland. Two vehicles will be deployed in Oakland.

b) Identify which of the three approaches specified in CCR, Title 9, Sect. 3910(a) the project will implement

This proposal makes a change to an existing practice in the field of mental health. While there have been a variety of approaches to improving crisis transport systems, Alameda has not been able to identify another program that uses this collaborative approach, staffing model, and technological access to increase the efficiency, accuracy and number of disposition options.

c) Briefly explain how you have determined that your selected approach is appropriate

Alameda's experience with SB82 and other system change efforts underscores the need for an active collaboration to ensure that barriers that are encountered can be addressed in a timely manner in order to realize the potential of the efforts. Crisis response models in other regions have provided insight into the potential of alternative staffing models for mobile crisis teams. The recent progress in electronic capabilities provides additional opportunities.

4) Innovative Component

a) If you are adapting an existing mental health model or approach, describe how your approach adds to or modifies specific aspects of that existing approach and why you believe these to be important aspects to examine.

The MHSOAC's "Triage Grant Information Gathering Brief – June 29, 2017" pointed out central challenges experienced within the Triage programs under SB82 – implementation delays, developing and maintaining successful collaborations, and effective evaluation of the programs. This has influenced the Triage grants to increase the use of collaboration to achieve the primary goals of SB82. Literature reviews support the need for interagency collaboration to improve crisis systems, and find that such efforts have been limited. **This project proposes to make the collaborative process the focus of the project and evaluation, recognizing that this is essential to making the level of systems change that is needed in Alameda County. This will allow Alameda to put the necessary time and resources behind working together to design the system improvements, as well as monitor them and make timely course corrections to ensure effectiveness**.

The collaboration will:

- Design the system changes
- Ensure that the staffing, training and policies are in place for effective implementation of innovative changes, including the EMT/behavioral health clinician crisis team, the use of ReddiNet and other shared records that all agencies must keep up to date, and the transport of clients to non-emergency services that will receive the clients efficiently
- Conduct continuous quality improvement to ensure timely course corrections
- Document and evaluate the process to assist with replication

In addition, the central strategies to be implemented are informed by, but go beyond, previous efforts of Alameda and other counties. **This project tests the provision of crisis assessment and transport for clients (whether they are on a 5150 hold or not) by a team that includes a behavioral health provider and an EMT in a non-emergency vehicle with technology supports that provide information about bed availability and client history.** This team maximizes the number of disposition options available and enables more efficient transfer of clients into services. Transitioning clients from one program to another is frequently the cause of delays, lack of follow-through, and loss of care continuity. Ideally this project will reduce 5150s both by providing thorough assessments on the scene and by connecting clients to planned services, reducing use of emergency services in the future.

5) Learning Goals / Project Aims

a) *What is it that you want to learn or better understand over the course of the INN Project, and why have you prioritized these goals?*

Alameda County has two primary learning goals:

1. Determine if and how collaboration among agencies responding to mental health crises can contribute to developing an effective and efficient crisis response system.
   - This learning goal focuses on whether the actions of the collaboration result in:
     - An effective system: One that gets clients to the services that they need at the right time. Such as reducing unnecessary 5150 holds and getting clients not on a hold to a service, increasing their engagement with planned services.
     - An efficient system: One that reduces the time spent by clients waiting to be transitioned to a service and reduces the time law enforcement/ambulances spend on psychiatric crises.
   - The central hypothesis is that intensive collaboration is required to make significant improvements to crisis response systems. This project will evaluate the role that collaboration plays in making improvements in a timely manner.

2. Determine if and how the changes in the crisis response system result in community and county priorities: better client services and more efficiency in the system.
   - This project will evaluate whether combining a unique staffing model in a non-emergency vehicle with technology supports to provide crisis assessment and transport leads to improved outcomes, including:
     - Better client services: Client are better served by a crisis response system if it results in them being connected to the services they need without stigma.
     - Efficiency: Reduce the time clients wait to be connected to services and the time law enforcement/ambulances spend on psychiatric crisis response.

b) *How do your learning goals relate to the key elements/approaches that are new, changed or adapted in your project?*

1. Determine if and how collaboration among agencies responding to mental health crises can contribute to developing an effective and efficient crisis response system.
   - Developing a collaboration to design, implement and support changes to the crisis response system is a key element of this Innovation plan. Based on past experience, the findings of SB82 Triage efforts to date, and existing literature, collaboration seems to be a necessary but not fully implemented element. This project will test this hypothesis, as well as inform sustainability and replication.

2. Determine if and how the changes in the crisis response system result in community and county priorities: better client services and more efficiency in the system.
   - The key change proposed is implementing a new crisis assessment and transport staffing model with appropriate technological support, resulting in the most disposition options for the client. This project will test if this new approach leads to success and how.

6) Evaluation or Learning Plan

1. Determine if and how collaboration among agencies responding to mental health crises can contribute to developing an effective and efficient crisis response system.

Data to collect	Data collection method
• Who participates in the collaborative • Collaborative meetings and other activities	• The Program Specialist will collect via membership rosters, sign-in sheets, meeting agendas, etc.
• Continuous quality improvement efforts: - What issues are brought to the collaboration - How they are resolved - How quickly they are resolved - What the result is	• The Program Specialist will collect via meeting minutes. • The evaluators will collect via observation and annual focus groups or key informant interviews with collaborative members.
• Collaborative members action, such as supporting shared client records and a system for tracking available beds in a variety of crisis services; updating policies and procedures to ensure timely access to crisis services; training staff; etc.	• The evaluators will collect via annual surveys and focus groups or key informant interviews with collaborative members.
• Collaborative members perception of the effectiveness of the collaboration, including what contributed to or impeded success	• The evaluators will collect via annual surveys and focus groups or key informant interviews with collaborative members.

2. Determine if and how the changes in the crisis response system result in community and county priorities: better client services and more efficiency in the system.

Short-Term Outcomes

Data to collect	Data collection method
• Number of clients served by CATT	• Electronic health records, including number assessed and number transported
• Number of clients not on 5150 hold transported to services	• Electronic health records show number of transports including 5150 status and final disposition of client
• Number of transported clients not on 5150 hold who engage in services	• Electronic health records show what services clients engaged in. Analyze level of engagement in planned mental health, substance use, or other relevant services before CATT transport to after CATT transport. Look at records 3 months after CATT transport.
• Client satisfaction, including perceptions of stigma	• Post crisis survey call by peer provider

Long-Term Outcomes

Linking non-5150 clients to appropriate services should result in lowered use of crisis services. In addition, CATT response should result in less involvement from law enforcement and ambulances in psychiatric crisis. The evaluators will look at impacts on the crisis system that are related to CATT implementation. Some examples:

• Efficiency of CATT response compared to other responses	• EMS measures ambulance response time to every request via 911 system, as well as time of transport to receiving destination and vehicle/crew time at receiving destination. This data will also be recorded for CATT. Data for EMS vs CATT will be compared, either by looking at matched cases or at comparable pools of cases.
• Percent change in numbers of 5150 transports to ED for medical clearance	• EMS tracks number of 5150 transports by city broken down by ED and PES destinations. This data can be compared for each city with CATT services for the few years before CATT to data after CATT implemented.
• Number of 5150 holds avoided	• Compare trends in 5150 hold rates by city before and after implementation. Compare changes between participating and non-participating Alameda County cities to increase the ability to show the impact of this program, versus other factors. • Compare trends in rates of clients brought to PES on a 5150 hold who meet medical necessity criteria for acute psychiatric services in Alameda before and after implementation. • Perception of CATT responders as to portion of clients that might have been put on 5150 hold but were not due to CATT involvement
• Change in time spent by law enforcement and ambulance services on psychiatric emergencies.	• Evaluators will analyze change in time due to CATT response. Methods may include: • Analyze pre-CATT records to estimate likely change in time spent • Compare pre-CATT records to post-CATT records, taking into consideration other factors that affect # of calls and time spent.

Evaluation of this project will be contracted out. The evaluators will assist in finalizing the evaluation plan, developing the appropriate tools, gathering and analyzing the data, and vetting the evaluation plan and tools with appropriate stakeholders. They will document factors that might affect the outcomes and will attempt to increase the validity of the results.

7) Contracting

The implementation of this project will be led by BHCS staff. Some of the staffing will be provided by EMS.

II. Additional Information for Regulatory Requirements

1) Certifications

2) Community Program Planning

The community planning process for the MHSA Three Year Plan was conducted from June – October 2017. During that process ACBHCS staff provided updates and information on current MHSA programs and community members provided input on mental health needs and services. There were three modes for providing input:

- Five large community forums (one in each Supervisorial District);

- Eighteen focus groups were conducted throughout Alameda County: Chinese speaking family members, African American family members, providers for refugees, providers for LGBTQ community, transitional age youth (2), Afghan immigrants, older adults, API and refugee providers and advocates, providers for individuals with developmental disabilities and mental illness, and Pool of Consumer Champions (BHCS's mental health consumer group);

- Community Input Surveys in all threshold languages: submitted by 550 unique individuals. Respondents were very diverse in age, race, and ethnicity. Fifty percent of respondents were from Oakland, while they make up only 30% of Alameda's population. Survey respondents included: mental health consumers (12%), family members (10%), community members (12%), education (2%), community mental health (13%), homeless/housing services (4%), county behavioral health (1%), faith-based (1%), community substance use services (1%), hospital/healthcare (4%), law enforcement (1%), NAMI (1%), veteran/veteran services (1%), other community services (4%), other/unknown (33%).

Details of the full process are provided in the MHSA FY 18-20 Three Year Plan (www.ACMHSA.org under Documents/MHSA Plans).

The BHCS Systems of Care and BHCS Housing Department were asked to submit proposals that addressed the needs identified in the community planning process. The proposed projects were vetted by MHSA staff based on whether they addressed community priorities, as well as other factors. For example, "Persons experiencing a mental health crisis" were identified as the second-most underserved population (54%).

Once the proposals were developed they were posted for 30-day public comment (April 13-May 13, 2018). A public hearing will be held on May 14, 2018 at 2pm 500 Davis Street, San Leandro Conference Rooms A/B. Substantive comments and responses will be included here.

3) Primary Purpose

Promote interagency collaboration related to mental health services, supports, or outcomes.

4) MHSA Innovative Project Category

Makes a change to an existing mental health practice that has not yet been demonstrated to be effective, including, but not limited to, adaptation for a new setting, population or community.

5) Population

a) If your project includes direct services to mental health consumers, family members, or individuals at risk of serious mental illness/serious emotional disturbance, please estimate number of individuals expected to be served annually. How are you estimating this number?

This project serves people experiencing a behavioral health crisis in the community that results in a 911 response, but that does not require emergency medical services. Numbers to be served are based on the current rates of 5150 holds during the hours of operation. Approximately 70% of 5150s are placed from 7:00 am to midnight.

Start Date	Community Served	5150 /year	Services /year	Year 1	Year 2	Year 3	Year 4	Year 5
10/18	San Leandro	1,200	840	840	840	840	840	840
10/18	Hayward	1,300	910	910	910	910	910	910
2/20	Oakland	5,300	3,710	0	0	2,000	3,710	3,710
TOTAL				1,750	1,750	3,750	5,460	5,460

b) Describe the population to be served

This table shows the demographics of the communities to be served.

	San Leandro	Hayward	Oakland
Total Population	90,465	144,186	412,040
Race/Ethnicity *			
Asian/Pacific Islander	32%	25%	17%
Black/African American	14%	12%	28%
Latino	40%	41%	25%
White	29%	34%	26%
American Indian	3%	1%	1%
Other/Unknown	8%	2%	3%

** Adds up to more than 100% as some people may be more than one race/ethnicity*

c) *Does the project plan to serve a focal population, e.g., providing specialized services for a target group, or having eligibility criteria that must be met? If so, please explain.*

This project serves people experiencing a behavioral health crisis in the community that results in a 911 response. Eligibility includes:

- Services are required in a location and during a time CATT is in service
- The situation must be assessed as safe by a law enforcement officer
- The individual cannot be in need of emergency medical services

BHCS and EMS will develop specific eligibility criteria in the initial phase of this project.

6) MHSA General Standards

a) Community Collaboration: The roll-out of this project will be presented to local consumer and family groups to provide information and get feedback. Alameda's Whole Person Care project, Care Connect, conducts consumer convenings to ensure community input. Updates on this project will be presented regularly at the convenings to solicit input on implementation and evaluation.

b) Cultural Competency: Program staff will receive cultural competency training. Efforts will be made to hire staff who reflect the diversity of the communities they will serve. Updates on this project will be presented regularly to BHCS' Cultural Competency Advisory Board to solicit input on implementation and evaluation.

c) Client-Driven: As described under Community Collaboration, ongoing input will be solicited from groups that include consumers.

d) Family-Driven: Care Connect records include crisis plans developed by consumers. These plans, and other means, will be used to repatriate clients with their support network as quickly as possible. At times families will participate in the "client satisfaction" phone surveys conducted, providing feedback about the services.

e) Wellness, Recovery, and Resilience-Focused: This program aims to reduce involuntary holds and increase access to services that support recovery.

f) Integrated Service Experience for Clients and Families: The goal of the collaborative is to integrate services toward efficiency and appropriate services. For example, sharing of records among agencies responding to crises, and particularly with the crisis teams, will lead to better coordination of care.

7) Continuity of Care for Individuals with Serious Mental Illness

Individuals with serious mental illness will be served by this project. Given that the services are crisis response services, if elements of this project do not continue, it will not disrupt continuity of care. Ideally, any changes that have been made and found to be successful will be sustained in one of three ways:

- The changes may be integrated into ongoing operations and will not require ongoing funding. This may include changes in policies and procedures, upkeep of shared data systems, collaborative relationships, etc.
- The changes may be sustained through non-MHSA funds. For example, once the billing for services has been established successfully the staffing model may be funded through reimbursements. Other costs may be covered by increased efficiencies.
- If other aspects of the project, such as the formal collaboration, need to be continued, BHCS will consider supporting these costs as described in question 9.

8) INN Project Evaluation Cultural Competence and Meaningful Stakeholder Involvement.

*a) Explain how you plan to ensure that the Project evaluation is **culturally competent**.*

The evaluation plan will be presented to BHCS' Cultural Competency Advisory Board (CCAB), the MHSA Stakeholder Committee and the Whole Person Care consumer convenings for feedback on the methods and outcomes. In addition, there will be regular presentations to the CCAB, MHSA Stakeholder Committee and consumer convenings as the evaluation is implemented in order to get ongoing feedback on issues that arise. Client/family satisfaction questions will be reviewed by members of the target groups prior to implementation and conducted in the appropriate language.

*b) Explain how you plan to ensure **meaningful stakeholder participation** in the evaluation.*

The collaboration participants will be actively involved in project implementation, including working with the evaluator to develop evaluations plans, tools, and data analysis. The CCAB, MHSA Stakeholder Committee and consumer convenings will contribute to evaluation planning, overseeing implementation, and analysis.

9) Deciding Whether and How to Continue the Project Without INN Funds

BHCS will support the continuation of this project or components of this project based on a number of internal and external factors and processes including: 1) the evaluation results from the project, 2) support and buy-in from the Adult & Older Adult System of Care 3) Continued buy-in from law enforcement 4) recommendations from the MHSA Stakeholder Committee & the CCAB, and 5) available funding. This project will be able to generate revenue through Medi-cal billing, which will help offset the overall costs and thus increase the probability of being sustained if there are positive results from the factors listed above. MHSA Community Services and Supports will be considered for costs not covered by MediCal or other sources.

10) Communication and Dissemination Plan

a) How do you plan to disseminate information to stakeholders

The CATT collaborative will be responsible for disseminating results to their agencies, other stakeholders, and other counties. Updates on the project will be provided to stakeholders on an ongoing basis via email and presentations at existing meetings. The final evaluation report for this project will be shared widely by posting it on the BHCS website and announcing via email to stakeholders, including to mental health directors, Alameda County Mental Health Board, MHSA coordinators, and EMS agencies throughout the state. In addition presentation will be made to the MHSA Stakeholder Group, the Cultural Competency Advisory Board (CCAB), the Whole Person Care consumer convenings, other consumer groups, NAMI, the Board of Supervisors, and other appropriate entities.

b) *How will program participants or other stakeholders be involved in communication efforts?*

The CATT collaborative members will be responsible for sharing the results with their agencies, providing presentations to the organizations listed above, and forwarding email announcements to their stakeholders. The Program Specialist will be responsible for website postings and email announcements.

c) *KEYWORDS for search:*

Collaborative crisis response system; Mobile mental health crisis response; Multidisciplinary mobile crisis team

11) Timeline

a) *Specify the total timeframe (duration) of the INN Project:* **5 Years**
b) *Specify the expected start date and end date of your INN Project:*
Start Date: October 2018 End Date: September 2023
c) *Include a timeline that specifies key activities and milestones*

Prior to implementation of the Innovation project, some aspects of the project will be underway due to Measure A funding (see budget narrative). This will include:

- MOUs in place with initial two participating communities
- Hiring of staff and contractors funded under Measure A
- CATT vehicles purchased and modified to CATT specifications
- Work with 911 dispatch to create system to dispatch CATT

Month	Milestone
Oct-Dec 2018	Assign Program Specialist from BHCS staff Begin monthly collaborative meetings Identify evaluator through competitive process Hire additional staff Staff training Begin program in two communities (San Leandro, Hayward)
Jan-Mar 2019	Develop evaluation plan Develop Continuous Quality Improvement (CQI) process Community Health Record access in all vehicles
Apr-Jun 2019	Begin implementation of evaluation plan
Jul-Sep 2019	Evaluation of program implementation to date
Oct-Dec 2019	Implement changes to project based on evaluation findings Staff hired for Oakland teams
Jan-Mar 2020	Staff training for Oakland teams Begin program in Oakland
Apr-Jun 2020	Begin evaluation of Oakland program
Jul-Sep 2020	Evaluation of program implementation to date
Oct-Dec 2020	Implement changes to project based on evaluation findings
Jan-Mar 2021	Begin sustainability evaluation and planning
Apr-Jun 2021	Continue CQI
Jul-Sep 2021	Evaluation of program implementation to date
Oct-Dec 2021	Implement changes to project based on evaluation findings
Jan-Mar 2022	Continue CQI
Apr-Jun 2022	Continue CQI
Jul-Sep 2022	Evaluation of program implementation to date
Oct-Dec 2022	Implement changes to project based on evaluation findings
Jan-Mar 2023	Continue CQI
Apr-Jun 2023	Preliminary data shared with stakeholders for input on data analysis Initial evaluation report shared with stakeholder to discuss sustainability
Jul-Sep 2023	Project completion Evaluation report completed, disseminated and presented Sustainability planning completed

This timeline allows for implementing the collaboration and new crisis response strategies in two communities to ensure the processes are running smoothly before implementing in Oakland, a much larger and more complex environment. Annual evaluation, Continuous Quality Improvement, and ongoing sharing of updates will ensure that evaluation and stakeholder input is supported. Time is allocated near the end of the project to allow for stakeholder input in data analysis and decisions about sustaining the project, as well as dissemination of final results.

12) INN Project Budget and Source of Expenditures

This INN Plan will use FY 08/09, FY 09/10 and part of FY 10/11 funds that were deemed reverted back to the county of origin under **AB 114.**

Alameda County has been awarded **SB82 funds** to initiate and expand a number of crisis response efforts to reduce crises and assist law enforcement with psychiatric crises. These projects have been successfully implemented, but do not address crisis transport and only support the collaboration needed to implement the discrete services in the SB82 projects.

This INN Plan is being implemented in partnership with Alameda County Emergency Medical Services (EMS). EMS has already secured **Measure A funds** through a competitive process to support the start-up of this project. Measure A was approved by voters in 2004 to support an array of services for low-income residents of Alameda County. Leveraging Measure A and Innovation funds sets the groundwork for a robust collaboration.

A. Project Budget by Year - Narrative

Salaries

FY18-19: 9 months (Oct-Jun): 7.2 FTE BH Clinicians at $60 per hour, 7.2 FTE EMTs at $34.25. This staffing level allows for two mobile teams from 7:00 am until midnight, seven days per week. 1 Clinical Supervisor at $150,000 annually, and 1 Program Specialist to manage the project at $135,000 annually. All listed with benefits calculated into hourly and annual rates. *Staff partly funded by Measure A.*

FY19-20: Jan-Jun 2020 the staff increases to a total of 14.4 FTE BH Clinicians and 14.4 FTE EMTs for Oakland teams. This staffing level allows for four mobile teams from 7:00 am until midnight, seven days per week. *Staff partly funded by Measure A*.

FY20-23: Staff stays at same level. *No Measure A funds, but MediCal billing factored in.*

FY23-24: 3 months (Jul-Sep): No additional costs incurred for final report dissemination and sustainability planning

Operating Costs

Data plan for tablets, mobile phone plans, fuel, and vehicle maintenance. *Measure A will cover these costs in FY18-19.*

Non-Recurring Costs

Vehicles, radios, vehicle modifications, Tablets, phones, laptops, software, staff training. *Measure A will cover these costs.*

Consultant Costs/Contractors

Evaluation consultant costs at roughly 5% of project cost ($125,000) with the exception of Yr 4 which will be higher ($200,000) to allow for deeper evaluation and sustainability planning as we near end of project. Peer/Family stipends to assist with gathering and analyzing data and outcomes: $20/hour x 500 hours = $10,000.

Indirect
15% for county administration of the project. Applies to Personnel, Operating and Contract expenditures.

Expend by Fund Source - Narrative

Administration
0.65 FTE of the Program Specialist.
Indirect expenses

Evaluation
0.35 FTE of the Program Specialist. Contracted evaluator. Peer/Family stipends to conduct client satisfaction surveys, assist with evaluation planning and data analysis.

Mental Health Expenditures
FFP: Once billing systems are developed, MediCal will reimburse for some services
Other Funding: Measure A (described above)

Community Assessment and Transport Team (CATT) Budget

B. New Innovative Project Budget By FISCAL YEAR (FY)*							
EXPENDITURES							
	PERSONNEL COSTs (salaries, wages, benefits)	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
1	Salaries	$820,047	$1,775,301	$1,613,471	$1,613,471	$1,613,471	$7,435,761
2	Direct Costs						$0
3	Indirect Costs	$ 123,007	$ 266,295	$ 242,021	$ 242,021	$ 242,021	$ 1,115,365
4	Total Personnel Costs	$ 943,054	$ 2,041,596	$ 1,855,492	$ 1,855,492	$ 1,855,492	$ 8,551,126
	OPERATING COSTs	**FY 18-19**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
5	Direct Costs	$ -	$ 80,775	$ 107,700	$ 107,700	$ 107,700	$ 403,875
6	Indirect Costs	$ -	$ 12,116	$ 16,155	$ 16,155	$ 16,155	$ 60,581
7	Total Operating Costs	$ -	$ 92,891	$ 123,855	$ 123,855	$ 123,855	$ 464,456
	NON RECURRING COSTS (equipment, technology)	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
8	**Vehicles and Equipment**	$0					$0
9	**Training**	$0					$0
10	Total Non-recurring costs	$0	$0	$0	$0	$0	$0
	CONSULTANT COSTS/CONTRACTS (clinical, training, facilitator, evaluation)	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
11	Direct Costs	$135,000	$135,000	$135,000	$210,000	$135,000	$750,000
12	Indirect Costs	$20,250	$20,250	$20,250	$31,500	$20,250	$112,500
13	Total Consultant Costs	$155,250	$155,250	$155,250	$241,500	$155,250	$862,500
	OTHER EXPENDITURES (please explain in budget narrative)	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
14							$0
15							$0
16	Total Other expenditures	$0	$0	$0	$0	$0	$0
BUDGET TOTALS							
Personnel (line 1)		$820,047	$1,775,301	$1,613,471	$1,613,471	$1,613,471	$7,435,761
Direct Costs (add lines 2, 5 and 11 from above)		$135,000	$215,775	$242,700	$317,700	$242,700	$1,153,875
Indirect Costs (add lines 3, 6 and 12 from above)		$143,257	$298,661	$278,426	$289,676	$278,426	$1,288,446
Non-recurring costs (line 10)		$0	$0	$0	$0	$0	$0
Other Expenditures (line 16)		$0	$0	$0	$0	$0	$0
TOTAL INNOVATION BUDGET		$1,098,304	$2,289,737	$2,134,597	$2,220,847	$2,134,597	$9,878,082

C. *Expenditures By Funding Source and FISCAL YEAR (FY)*							
Administration:							
A.	**Estimated total mental health expenditures for ADMINISTRATION for the entire duration of this INN Project by FY & the following funding sources:**	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
1	Innovative MHSA Funds	$ 209,079	$ 386,411	$ 366,176	$ 377,426	$ 366,176	$ 1,705,268
2	Federal Financial Participation						
3	1991 Realignment						$ -
4	Behavioral Health Subaccount						$ -
5	Other funding*						
6	**Total Proposed Administration**	**$ 209,079**	**$ 386,411**	**$ 366,176**	**$ 377,426**	**$ 366,176**	**$ 1,705,268**
Evaluation:							
B.	**Estimated total mental health expenditures for EVALUATION for the entire duration of this INN Project by FY & the following funding sources:**	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
1	Innovative MHSA Funds	$ 146,213	$ 182,250	$ 182,250	**$ 257,250**	$ 182,250	$ 950,213
2	Federal Financial Participation						$ -
3	1991 Realignment						$ -
4	Behavioral Health Subaccount						$ -
5	Other funding*						$ -
6	**Total Proposed Evaluation**	**$ 146,213**	**$ 182,250**	**$ 182,250**	**$ 257,250**	**$ 182,250**	**$ 950,213**
TOTAL:							
C.	**Estimated TOTAL mental health expenditures (this sum to total funding requested) for the entire duration of this INN Project by FY & the following funding sources:**	**FY 18-19 9 months**	**FY 19-20**	**FY 20-21**	**FY 21-22**	**FY 22-23**	**Total**
1	Innovative MHSA Funds	$ 1,098,304	$ 2,289,737	$ 2,134,597	$ 2,220,847	$ 2,134,597	$ 9,878,082
2	Federal Financial Participation			$ 1,150,000	$ 1,150,000	$ 1,150,000	$ 3,450,000
3	1991 Realignment						$ -
4	Behavioral Health Subaccount						$ -
5	Other funding* (Measure A)	$ 920,293	$ 564,557				$ 1,484,850
6	**Total Proposed Expenditures**	**$ 2,018,597**	**$ 2,854,294**	**$ 3,284,597**	**$ 3,370,847**	**$ 3,284,597**	**$ 14,812,932**
*If "Other funding" is included, please explain.							

Measure A are local funds already secured by Alameda County Emergency Medical Services for this project. See Budget Narrative.

INNOVATIVE PROJECT PLAN DESCRIPTION

County: Alameda Date Submitted 4/13/18
Project Name: Cannabis Policy and Education for Young Adults

I. Project Overview

1) Primary Problem

California's legalization of recreational cannabis puts older Transitional Age Youth mental health clients at particular risk for negative consequences.

Adult Use of Marijuana Act (AUMA) legalizes "recreational" use and cultivation of cannabis for those 21 years of age and older in California under state law. Commercial sale, cultivation, and production of cannabis are allowed only by licensed providers. Trends in Colorado since similar legislation was enacted there in 2012 included:

- Rates of cannabis use among 18-24 years olds increased from 21% (2006) to 31% (2014)
- Cannabis-related calls to poison control centers increase from 44 (2006) to 227 (2015)
- Cannabis-related arrests decreased by 46% between 2012 and 2014.

While the reduction in legal system involvement due to legalization can be beneficial, the increased access to cannabis may have other negative effects on mental health consumers. The National Institute on Drug Abuse has reviewed the literature and determined that consequences of cannabis use include:

- anxiety and paranoia (present during intoxication);
- impaired learning and coordination and sleep problems (lasts longer that intoxication, but may not be permanent), and
- increased risk for substance use disorders (Timberlake DS. *Susbst Use Misuse.* 2009.), learning and memory impairments, and loss of IQ when there has been heavy use during adolescence.

drugabuse.gov/publications/cannabis/there-link-between-cannabis-use-psychiatric-disorders

While there is still much debate about the relationship between marijuana use and serious mental illness, NIDA concludes these correlations are emerging in the research:

- People with a genetic variation who used cannabis daily had seven times more likelihood of developing psychosis than those who used it infrequently or not at all (DiForti et al. *Biol Psychiatry*. 2012.)
- Adults with a genetic variation have a higher risk of psychosis if they used cannabis in adolescence (Caspi et al. *Biol Psychiatry*. 2005.)
- Cannabis worsens the course of illness in individuals who have schizophrenia (Foti et al. Am J Psychiatry. 2010.)

- Cannabis, especially at high dosage, can produce an acute psychotic reaction in individuals without schizophrenia (Morgan CJA. *Br J Psychiatry J Ment Sci.* 2013.)

Moreover, there are concerns about the interaction between cannabis and other pharmaceutical medications that might put mental health consumers at risk. While more research needs to be conducted, the medical field is reporting that cannabis use should be avoided when using benzodiazepines, selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), and anti-psychotics. While these medications have different interactions with cannabis, general side effects include sleepiness, dizziness, over sedation, and potential serotonin fluctuations. In addition to side effects, it can be very challenging for physicians to prescribe the most appropriate antidepressant or similar drug at the right dose to patients who also use cannabis, and co-occurring cannabis use can impede their ability to accurately assess efficacy of prescribed drugs. As a final note, physicians anecdotally report that some patients who use cannabis, alcohol, or other drugs during treatment — particularly those with severe depression or bipolar disorder — are less likely to adhere to their treatment protocols, including prescription drugs and behavioral interventions (e.g., cognitive behavioral therapy, psychotherapy, etc.).

Alameda County's transition age youth triage project funded by SB82 kept daily records on TAY clients experiencing mental health crises. They estimate approximately 70% of youth had used cannabis within 24 hours before the onset of the crisis. In the recent community planning process for Alameda County's MHSA Three Year Plan, parents and consumers expressed significant concern about the impact of cannabis use on individuals experiencing mental illness.

a) *Describe what led to the development of the idea for your INN project and the reasons that you have prioritized this project over alternative challenges identified in your county.*

While the issues associated with cannabis use are not new, they have been changing due to easier access and increased potency. One of the challenges in addressing cannabis policy and education is its complex legal status. While it has been legalized at the state level, it remains illegal at the federal level, impacting policy, practice, and funding considerations. Given that the new laws regarding cannabis in California just took effect on January 1, 2018, there is a surge of interest in the issue and a change in the environment that provides a unique opportunity to develop a positive and proactive collaboration with the cannabis industry, consumers, families, providers and others to support the health of consumers. For example, one of Alameda's Supervisors has been convening meetings regarding cannabis, including working with dispensaries on licensing requirements. **There is a need to determine effective policy and practices for service providers and the cannabis industry, as well as education strategies, to protect mental health consumers proactively within the complex legal environment that exists.**

2) What Has Been Done Elsewhere To Address Your Primary Problem?

Alameda County Behavioral Health Care Services (BHCS) staff has been researching the intersection of cannabis use and mental illness, prevention and harm reduction education efforts, and models in other states. Some of this research has been done online, but given that legalization is a more recent trend, attendance at conferences has been a successful approach to get up-to-date information. Most recently, BHCS staff attended California Institute for Behavioral Health Solutions' Adolescent Early Intervention

and Substance Use Disorder Treatment Summit. While it focused on substance use treatment, it provided an opportunity to learn about current research and practices, as well as make connections with experts in cannabis and youth. It *did not* address cannabis use and youth with mental illness, but it did provide information about the changing cannabis landscape and substance use prevention that is helpful in shaping this proposal.

SAMHSA has education and treatment materials for youth. Colorado has an extensive public health effort. Colorado also has developed a "responsible vendors" training and certification that engages the cannabis industry. In California, there are discussions about cannabis prevention given the change in legal status, but they are focused on regulating the industry and public health campaigns. The California Department of Public Health (cdph.ca.gov) "Let's Talk Cannabis" campaign also targets the general public. What we have not been able to find is an effort that focuses on mental health clients. There are a variety of differences between developing a harm reduction campaign for the general population versus mental health clients. For example, BHCS and other providers have in depth relationships with their clients that can provide information and support far beyond brochures, short trainings, and public messaging. In addition, clients have specific predispositions and poly-pharmacy issues that need to be addressed on an individual level.

This project aims to build on existing public health and harm reduction approaches in order to mitigate harm to mental health clients. The existing approaches are not specific to mental health clients and do not fully leverage the role that the cannabis industry can play. This INN project provides an opportunity to test new approaches, in a changing landscape, before adopting them as ongoing practices.

3) The Proposed Project

Legalization and resulting increased access to cannabis may lead to increased use and increased negative consequences among mental health consumers. **The purpose of this project is to reduce the risks and harms associated with cannabis access and use for young adults (21-24 years old) experiencing serious mental illness.**

We propose to accomplish this by developing a collaborative approach among key stakeholders, including consumers, families, and the cannabis industry. Developing a positive and proactive collaboration with the cannabis industry is a unique approach to support the health of consumers. This collaboration will enable us to:

- Understand the impact of state legalization of cannabis on mental health consumer's perceptions of and level of use.
- Improve the cannabis industry's understanding of mental illness and the effect of cannabis use on mental health consumers.
- Influence cannabis industry marketing and sales efforts to reduce risk and promote safety for mental health consumers.
- Tailor individual, group, and community harm reduction and psycho-education interventions to incorporate consumer and family perspectives.

Two advisory committees will be formed:

1) **Policy Committee:** A collaborative task force including behavioral health, physical health, law enforcement, schools, the cannabis industry, and others. The focus of this collaboration will be to share expertise, conduct research, and develop practice guidelines for participating sectors, educational efforts, relevant policies, and other areas. Including the cannabis industry provides an opportunity to incorporate their knowledge and get them on board with protecting the health of consumers. **This committee will focus on determining effective practices and policies among these institutions given the complex legal status of cannabis.** Actions may include:

   - Developing policies and guidelines for educating consumers about cannabis usage and serving consumers who use cannabis.
   - Consulting with State and federal agencies, such as California Department of Health Care Services (DHCS), regarding legal and funding issues affecting potential service and education policies.
   - Working with the Alameda County Counsel to survey legislative landscape.

2) **Consumer and Family Committee**: Develop a collaborative task force including family members, consumers, and behavioral health providers. **This committee will focus on better understanding cannabis usage from the consumers' perspective**, as well as providing input on the work of the Policy Committee. Actions may include:

   - Developing and implementing a study of cannabis use by BHCS young adult (21-24) clients. This will help determine baseline data, as well as inform the development of policies and practices.
   - Developing an educational campaign informed by both consumers and the Policy Committee. Strategies to be considered may include:
     - Peer education: We expect that TAY clients will participate in implementing the educational campaign as peer educators. Their exact role will depend on the education strategies chosen.
     - Technology-based education: Given that technology is an effective way to reach the target age group, we expect that an educational App will likely be developed. The scope of such an App would have to be informed by legal counsel.
     - Guidelines or toolkits for providers: This would include information and materials providers can use to implement the education campaign with their clients. There may also be version for family members.
     - Other ideas may be generated through the collaborative process.
   - Developing expertise among a BHCS providers in cannabis use and mental health by working with expert consultants. Experts can provide trainings, manuals, and individual consultation for mental health and non-mental health providers serving young adult consumers.

The results of this process are expected to lead to:

1) **A model for working with the cannabis industry to develop and implement effective practices to support the health of mental health consumers**

2) **A well informed and collaborative education/harm reduction approach regarding cannabis and young adult consumers given the current legal environment**

a) *Identify which of the three approaches specified in CCR, Title 9, Sect. 3910(a) the project will implement*

This project adapts existing public health and harm reduction practices from non-mental health settings to target young adult mental health clients.

b) *Briefly explain how you have determined that your selected approach is appropriate.*

There are existing public health and harm reduction campaigns regarding cannabis, as well as other legal and illegal substances, that have a lot to contribute to this project. There is research on the effects of these substances, effective messaging, etc. Some states have successfully engaged the cannabis industry to receive training in being responsible vendors. This provides a model that this project can build on. But this project proposes to adapt these models, through a collaborative process, to provide a deeper and tailored approach for mental health consumers.

4) Innovative Component

One aspect of this project that is innovative is proactively working with the cannabis industry to protect the health of mental health consumers. While there are efforts to train dispensaries to be responsible vendors in terms of age limits and quantities, this project aims to engage industry representatives in an active role to protect the health of mental health clients. Historically, industries such as tobacco, alcohol, and firearms have only engaged in consumer protection after legal intervention. We have an opportunity to proactively engage the cannabis industry to assist in developing and enacting practices to protect health and empower consumers. Such practices may include providing educational materials resulting from this project, adding education about mental health related issues to vendor trainings, or other strategies developed through this project.

The central innovation is that we are adapting models for the general public to focus on the health of mental health consumers. There are substance use prevention programs, cannabis public health campaigns, motivational interviewing, and other models that can be borrowed from, but none of them focus on mental health consumers. To address mental health consumers, scope and strategies will need to be tested and *tailored* for the mental health consumer population. For example, policies, practices and strategies will:

- Focus on deeper work with clients, rather than general education campaigns.
- Focus on the risks and behaviors of mental health clients.

This is imperative because the success of any informational materials, campaigns and/or tool kits will depend on the level of clear focus and targeted messaging; this is something that will be tested as BHCS adapts existing model from the general public.

California finds itself in a new legal environment regarding cannabis. Our goal would be to develop effective practices that other county mental health systems can adapt for their clients. One of the key strategies that Colorado has taken is to monitor the effects of legalization on usage, accidents, etc. **We hope that by being proactive we can influence the effects on young adult mental health consumers right from the start.**

5) Learning Goals / Project Aims

a) What is it that you want to learn or better understand over the course of the INN Project, and why have you prioritized these goals?

Alameda County aims to learn:

Can a collaboration that includes the cannabis industry, consumers, and other key stakeholders result in practices that reduce potential harm to young adult mental health consumers in regards to cannabis usage?

Learning Goals

1. Determine how to develop a successful collaboration that includes the cannabis industry.
   - This project hypothesizes that working collaboratively with the cannabis industry to protect the health of mental health clients is an essential, but untested, strategy.
   - A successful collaboration will: engage the key stakeholders – including the cannabis industry; result in implementation of suggested actions by collaborative partners; and result in partners reporting that the collaboration is successful.

2. Determine if and how a collaboration results in effective practices for reducing potential harm for young adult consumers in regards to cannabis usage.
   - The central reason for this project is to protect the health of mental health consumers given the current cannabis environment. This project seeks to understand the legal environment that impacts this goal and the needs of the consumers to inform effective practices.
   - While there are debates about the potential harm of cannabis use to mental health consumers, overall there is reason to believe that reduced use of cannabis, and informed/responsible use, can lead to better outcomes: lower rates of addiction, less chance of poly-pharmacy problems, better adherence to medication regimens and less risk of crisis incidents.

b) How do your learning goals relate to the key elements/approaches that are new, changed or adapted in your project?

Learning Goals

1. Determine how to develop a successful collaboration that includes the cannabis industry.
   - The cannabis industry has been engaged as partners to enforce regulations, such as age and quantity limits. We believe they can be engaged to help develop and implement practices to protect the health of our clients. This project will test this hypothesis, as well as inform sustainability and replication.

2. Determine if and how a collaboration results in effective practices for reducing potential harm for young adult consumers in regards to cannabis usage.
   - Given the unique status of cannabis in California, developing policies and education will require learning from similar projects, but also understanding and applying current legal parameters. In addition, understanding the needs and perspectives of young adult mental health clients and others is key to developing effective practices.

6) *Evaluation or Learning Plan*

Learning Goals

1. Determine how to develop a successful collaboration that includes the cannabis industry.

Data to collect	Data collection method
• Engagement efforts conducted with the cannabis industry • The response of the cannabis industry	• The project coordinator will track activities and results
• Who participates in the collaborative • Collaborative meetings and other activities • Collaborative discussions, decisions, and actions intended to protect the health of consumers	• The project coordinator will collect via membership rosters, sign-in sheets, meeting minutes, etc.
• Actions taken by collaborative members, such as implementing practices determined by the project • Collaborative members perception of the effectiveness of the collaboration, including what contributed to or impeded success	• Surveys and focus groups with collaborative members. These would take place each year within the schedule of the collaborative meetings.

2. Determine if and how a collaboration results in effective practices for reducing potential harm for young adult consumers in regards to cannabis usage.

Data to collect	Data collection method
• What policies, practices, or campaigns resulted from the collaborative effort	• The project coordinator will track products of the collaborative work.
• How were the policies, practices, or campaigns implemented (by whom, for whom, in what context, etc.),	• Surveys and focus groups with staff of organizations participating in implementation. Conduct at the conclusion of the project.
• What were the strengths/weaknesses of the policies, practices, or campaigns in practice	• Surveys and focus groups with staff noted above. Surveys and focus groups with consumers and family members receiving services informed by this project. Conduct at the conclusion of the project.
• How were the cannabis industry's attitudes and practices affected	• Surveys and focus groups with cannabis industry representatives. Conduct at the conclusion of the project. Cannabis industry collaborative members will help recruit participants.
• Changes in client knowledge, attitudes and behaviors regarding cannabis use. Goal for clients receiving a minimum number of services developed by this project	• The evaluator will develop a brief questionnaire (3-5 questions) that BHCS providers will ask clients (21-25) and record answers in the EHR at regular intervals. It will be designed to provide data on: # of youth avoiding or reducing marijuana purchase # of youth avoiding or reducing marijuana use

- 50% avoid/reduce purchase - 50% avoid/reduce use - 70% increase knowledge	# of youth with increased understanding of the risks of marijuana use on their overall health and recovery
• Changes in negative consequences associated with cannabis use. Goal for clients receiving a minimum number of services developed by this project - Statistically significant difference in these indicators compared to those not receiving the services	Possible indicators for clients receiving a minimum number of services developed by this project: • Compare number of crisis incidents, hospitalizations and/or incarcerations in year before intervention and year after • Compare changes in Child and Adolescent Needs and Strengths (CANS) before and after intervention • Percent who complete their BHCS treatment goals

Evaluation of this project will be contracted out. The evaluators will assist in developing appropriate tools, finalizing the evaluation plan, gathering and analyzing the data. They will document factors that might affect the outcomes, such as the increased access to cannabis. While those factors cannot be controlled for, the evaluation design will attempt to increase the validity of the results.

7) Contracting

The implementation of this project will be led by BHCS staff with assistance from several consultants. BHCS will provide a .5 FTE program coordinator to lead the project, which will include, but not be limited to: working with county counsel and the Department of Health Care Services to stay abreast of the legal landscape regarding cannabis, creating outreach strategies, facilitating the workgroups, engaging various stakeholder groups (consumers and family members, the cannabis business community, other public departments, etc.) and overseeing the work of the contracted evaluators and consultants.

II. Additional Information for Regulatory Requirements

1) Certifications

2) Community Program Planning

The community planning process for the MHSA Three Year Plan was conducted from June – October 2017. During that process BHCS staff provided updates and information on current MHSA programs and community members provided input on mental health needs and services. There were three modes for providing input:

- Five large community forums (one in each counry supervisorial district)
- Eighteen focus groups were conducted throughout Alameda County: Chinese speaking family members, African American family members, providers for refugees, providers for LGBTQ

community, transitional age youth (2), Afghan immigrants, older adults, API and refugee providers and advocates, providers for individuals with developmental disabilities and mental illness, and Pool of Consumer Champions

- Community Input Surveys in all threshold languages: submitted by 550 unique individuals. Respondents were very diverse in age, race, and ethnicity. Fifty percent of respondents were from Oakland, while they make up only 30% of Alameda's population. Survey respondents included: mental health consumers (12%), family members (10%), community members (12%), education (2%), community mental health (13%), homeless/housing services (4%), county behavioral health (1%), faith-based (1%), community substance use services (1%), hospital/healthcare (4%), law enforcement (1%), NAMI (1%), veteran/veteran services (1%), other community services (4%), other/unknown (33%)

Details of the process are provided in the MHSA Three Year Plan www.ACMHSA.org (click on Documents/MHSA Plans).

The BHCS Systems of Care and BHCS Housing Department were asked to submit proposals that addressed the needs identified in the community planning process. The proposed projects were vetted by MHSA staff based on whether they addressed community priorities, as well as other factors. For example, substance use/abuse was the third top concern identified for Youth/Transitional Age Youth during the planning process. In addition, specific comments were made about the need for new approaches to substance use, concerns about poly-pharmacy, and concerns about increased access to cannabis. Community concern about the potential impact of cannabis legalization has resulted in responses from the Board of Supervisors including a cannabis workgroup focusing primarily on regulation. The significant level of attention to this issue provides both an incentive and an opportunity for this work.

This proposal will be posted for public comment from April 13-May 13, 2018. On May 14, 2018 a public hearing will be held at 2pm 500 Davis Street, San Leandro Conference Rooms A/B.
Substantive comments and responses will be included here.

3) Primary Purpose

Promote interagency collaboration related to mental health services, supports, or outcomes

4) MHSA Innovative Project Category

Introduces a new application to the mental health system of a promising community-driven practice or an approach that has been successful in a non-mental health context or setting.

5) Population (if applicable)

a) If your project includes direct services to mental health consumers, family members, or individuals at risk of serious mental illness/serious emotional disturbance, please estimate number of individuals expected to be served annually. How are you estimating this number?

This project is intended to inform services provided for mental health consumers ages 21-24. In FY2016-17, BHCS served 1,673 young adults (21 to 24), which would represent the maximum number of possible consumers to be reached by this project. This project aims to reach about 50% (836) during the life of the Innovation project by the developed educational campaign, such as toolkits, brochures, provider trainings, peer education, or other targeted strategies.

b) Describe the population to be served, including relevant demographic information

This project is intended to inform services provided for mental health consumers ages 21-24. Those consumers reflect the diversity of Alameda County and therefore any materials produced would be translated into all threshold languages.

Demographics of BHCS clients ages 21-24 FY 2016-17

	Males N=999	**Females N=674**
Race/Ethnicity		
Asian/Pacific Islander	8%	6%
Black/African American	34%	34%
Latino	17%	19%
White	17%	15%
Other/Unknown	24%	26%
Primary Language		
English	87%	87%
Spanish	9%	9%
Other/Unknown	4%	4%

c) Does the project plan to serve a focal population, e.g., providing specialized services for a target group, or having eligibility criteria that must be met? If so, please explain.

Eligibility: BHCS clients ages 21-24.

6) MHSA General Standards

a) Community Collaboration: The focus of this project is community collaboration, including having consumers, family members, and community organizations as key participants in determining effective practices.

b) Cultural Competency: Collaboration members will represent the diversity of the Alameda County population. The policies, practices and campaigns proposed by the collaboration will also be reviewed by the BHCS Cultural Competency Advisory Board before final approval. In addition, the project will incorporate perspectives from consumers, families, and community members in regards to current and traditional use of cannabis in order to develop effective harm reduction strategies for working with clients.

c) Client-Driven: Consumers will be active participants of the collaboration that develops effective practices and educational campaigns, as well as oversees the evaluation of this INN project. The Alameda County MHSA Stakeholder Committee will also be involved in monitoring the progress of this project through bi-annual updates and presentations from the program coordinator.

d) Family-Driven: Family members will be active participants of the collaboration that develops effective practices and educational campaigns, as well as oversees the evaluation of this INN project.

e) Wellness, Recovery, and Resilience-Focused: This project embraces the importance of recovery, empowerment, self-responsibility and self-determination and therefore seeks to develop effective practices based on what consumers determine they need to achieve these goals. The harm reduction framework works with clients where they are and engages them in self-determination in their recovery process.

f) Integrated Service Experience for Clients and Families: This project integrates cannabis harm reduction approaches into regular mental health services for BHCS clients.

7) Continuity of Care for Individuals with Serious Mental Illness

Young adults (21-24) with serious mental illness will receive services informed by the research, guidance, and practices developed by this project.

- Any changes to policies and practices that have been made and found to be successful will be integrated into ongoing operations and will not require ongoing funding.
- The expertise developed by BHCS staff will remain with them, but time to keep up-to-date and provide training and consultation for others will require funding.
- Depending on what educational strategies are developed, they may require ongoing funding, such as upkeep of technology based strategies or peer services.

8) INN Project Evaluation Cultural Competence and Meaningful Stakeholder Involvement.

a) Explain how you plan to ensure that the Project evaluation is culturally competent.

The Cultural Competency Advisory Board (CCAB) and the Consumer and Family Committee of this project, made up of diverse consumers, family members and providers, will vet the evaluation framework, methods and tools. In addition, the Consumer and Family Committee will review initial evaluation findings to assist with interpretation of results and identifying additional questions for analysis.

b) Explain how you plan to ensure meaningful stakeholder participation in the evaluation.

In addition to the involvement of the CCAB and the Consumer and Family Committee described above, the Policy Committee of this project, made up of providers, cannabis industry, and other stakeholders, will vet the evaluation framework, methods and tools. In addition, it will review initial evaluation findings to assist with interpretation of results and identifying additional questions for analysis.

9) Deciding Whether and How to Continue the Project Without INN Funds

The evaluation of this project will be essential for determining whether the process and the product are successful. This will inform decisions about whether to terminate or continue components, as well as whether to expand or replicate components.

BHCS will support the continuation of this project or components of this project based on a number of internal and external factors and processes, including: 1) the evaluation results from the project, 2) support and buy-in from the Children and Youth System of Care and 3) recommendations from the MHSA Stakeholder Committee and the CCAB, and 4) available funding. MHSA Community Services and Supports funds will be considered for continuing the program since it focuses on services for clients experiencing serious mental illness. BHCS would also consider if aspects of the program are applicable to PEI efforts.

10) Communication and Dissemination Plan

a) How do you plan to disseminate information to stakeholders within your county and (if applicable) to other counties?

The committee members will be responsible for disseminating results to their agencies or organizations, other stakeholders, and other counties. Updates on the project will be provided to stakeholders on an ongoing basis via email and presentations at existing meetings. The final evaluation report for this project will be shared widely by posting it on the BHCS website and announcing via email to

stakeholders, including to mental health directors, substance use directors, and MHSA coordinators throughout California. In addition, presentations will be made to the MHSA Stakeholder Group, the Cultural Competency Advisory Board, consumer groups, NAMI, the Board of Supervisors, and a special community forum.

b) *How will program participants or other stakeholders be involved in communication efforts?*

The committee members will be responsible for sharing the results with their agencies, providing presentations to the organizations listed above, and forwarding email announcements to their stakeholders. The project coordinator will be responsible for website postings and email announcements.

c) *KEYWORDS for search:*

Cannabis education for mental health clients; Cannabis industry mental health prevention

11) Timeline

a) *Specify the total timeframe (duration) of the INN Project:* **3 Years 3 Months**
b) *Specify the expected start date and end date of your INN Project:*
Start: October 2018 End: December 2021
c) *Include a timeline that specifies key activities and milestones*

Timeline	Activities/Milestones	Responsible
Oct -Dec 2018	Project Coordinator start Begin collecting evaluation data about the process Begin formal outreach to develop project committees Begin research on legal aspects of client education regarding cannabis.	BHCS staff Project Coord Project Coord Project Coord
Jan 2019	First meeting of the project committees: Clarify goals, roles and processes Begin developing evaluation plan	All Evaluator
Feb-Jun 2019	Develop an understanding of the key issues regarding cannabis and mental health clients, legal issues, relevant models, etc. Develop an understanding of the key issues regarding cannabis and mental health clients, legal issues, relevant models. Develop survey for BHCS clients. Determine priority areas for policy and effective practices. Develop model policies and practices. Vet as appropriate. Implement client survey. Develop educational strategies. Vet as appropriate. Evaluation Plan: Vetted by project committees and CCAB Determine consultant roles and release RFPs	Policy Com Consumer/ Family Com Policy Com Consumer/ Family Com Evaluator Proj Coord
Jul-Dec 2019	Identify role of peer educators and hire peers Contract with consultants (such as training, material development) Evaluation Tools: Vetted by project committees and CCAB	Committees Proj Coord Evaluator
Jan-Jun 2020	Gather and review initial feedback on committee effectiveness, policies, practices, educational strategies. Make adjustments Begin providing training and consultation to providers Implement initial model policies, practices, educational strategies.	Evaluator Consultant(s) Collaborative partners
Jul 2020-Jun 2021	Continue implementation of policies, practices, and educational strategies	Collaborative partners
July 2021	Complete collection of evaluation data	Evaluator
Aug-Sep 2021	Analyze evaluation data, with input from Committees	Evaluator
Oct-Dec 2021	Disseminate results Determine whether/how to continue project	Committees, Project Coord BHCS, Stakeholders

This timeline includes evaluation throughout the project, beginning with vetting and finalizing and evaluation plan with the project committees and the CCAB; developing the evaluation tools with similar input; gathering preliminary data to make course corrections; gathering final data; and analyzing the data with the project committees. The last six months of the timeline allows time for data collection, analysis, dissemination, and the process to determine whether and how to continue the project. This work is feasible in this timeline because there will be efforts throughout the project to keep stakeholders informed and to consider sustainability plans.

12) INN Project Budget and Source of Expenditures

This INN Plan will use FY 10/11 funds, which will cover years 1 (FY 18/19) and 2 (19/20) of this project. These funds were deemed reverted back to the county of origin under **AB 114**.

A. Budget Narrative – Project Budget by Year

Salaries:
BHCS will provide a 0.5 FTE Program Coordinator ($90,000 annual including wages and benefits) to lead the project, which will include, but not be limited to: working with county counsel and the Department of Health Care Services to ensure no legal ramifications, creating outreach strategies, facilitating the workgroups, engaging various stakeholder groups (consumers and family members, the cannabis business community, other public departments, etc.) and overseeing the work of the contracted evaluators and consultants.

Operating:
This includes incentives for clients and family members, such as food at meetings and stipends for participation in meetings, focus groups, etc. The majority of the funds are to stipend consumers/family members to provide peer education services starting in FY19-20. It also includes printing of materials, including outreach and educational materials.

Estimated allocations:
FY18-19: $10,000 for food and stipends for client/family participation
FY19-20 and FY20-21: $30,000 materials and printing, $10,000 food,
$80,000 stipends ($20/hour x 4000 hours for providing peer education, planning, and evaluation services)
FY19-20: $5000 materials and printing, $5000 food,
$45,000 stipends ($20/hour x 2250 hours for providing peer education, planning, and evaluation services)

Non-Recurring:
Due to targeting 21-24 year olds, the education campaign will likely include technology-based strategies. An educational App is likely, but will require input from the project committees, as well as legal counsel.

Consultants/Contracts:
An evaluation contractor will be hired (estimated $60,000 for a full year). Other consultants will be hired on the basis of need and expertise, such as content experts, materials development, training, and technology development/maintenance.

Indirect Costs:

BHCS charges 15% for indirect costs incurred in managing funds. This applies to Personnel, Operating and Contract expenditures.

Budget Narrative – Expend by Fund Source

Administration:
Half of the Program Coordinators time would be administrative, as well as indirect expenses.

Evaluation:
Evaluation contractor; half of the Program Coordinator's time; a portion of the Operating funds for consumer/family stipends to participate in evaluation development, implementation, and analysis.

Cannabis Policy and Education for Young Adults Budget

B. New Innovative Project Budget By FISCAL YEAR (FY)*						
EXPENDITURES						
	PERSONNEL COSTs (salaries, wages, benefits)	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
1	Salaries	$ 67,500	$ 90,000	$ 90,000	$ 45,000	**$ 292,500**
2	Direct Costs	$ -				**$ -**
3	Indirect Costs	$ 10,125	$ 13,500	$ 13,500	$ 6,750	**$ 43,875**
4	Total Personnel Costs	**$ 77,625**	**$ 103,500**	**$ 103,500**	**$ 51,750**	**$ 336,375**
	OPERATING COSTs	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
5	Direct Costs	$ 10,000	$ 120,000	$ 120,000	$ 55,000	**$ 305,000**
6	Indirect Costs	$ 1,500	$ 18,000	$ 18,000	$ 8,250	**$ 45,750**
7	Total Operating Costs	**$ 11,500**	**$ 138,000**	**$ 138,000**	**$ 63,250**	**$ 350,750**
	NON RECURRING COSTS (equipment, technology)	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
8	**Technology**		$ 40,000	$ 40,000	$ 10,000	**$ 90,000**
9						**$ -**
10	Total Non-recurring costs	**$ -**	**$ 40,000**	**$ 40,000**	**$ 10,000**	**$ 90,000**
	CONSULTANT COSTS/CONTRACTS (clinical, training, facilitator, evaluation)	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
11	Direct Costs	$ 55,000	$ 280,000	$ 180,000	$ 100,000	**$ 615,000**
12	Indirect Costs	$ 8,250	$ 42,000	$ 27,000	$ 15,000	**$ 92,250**
13	Total Consultant Costs	**$ 63,250**	**$ 322,000**	**$ 207,000**	**$ 115,000**	**$ 707,250**
	OTHER EXPENDITURES (please explain in budget narrative)	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
14						**0**
15						**0**
16	Total Other expenditures	**0**	**0**	**0**	**0**	**0**
BUDGET TOTALS						
Personnel (line 1)		$ 67,500	$ 90,000	$ 90,000	$ 45,000	**$ 292,500**
Direct Costs		$ 65,000	$ 400,000	$ 300,000	$ 155,000	**$ 920,000**
Indirect Costs		$ 19,875	$ 73,500	$ 58,500	$ 30,000	**$ 181,875**
Non-recurring costs		$ -	$ 40,000	$ 40,000	$ 10,000	**$ 90,000**
Other Expenditures		$ -	$ -	$ -	$ -	**$ -**
TOTAL INNOVATION BUDGET		**$ 152,375**	**$ 603,500**	**$ 488,500**	**$ 240,000**	**$ 1,484,375**

C. *Expenditures By Funding Source and FISCAL YEAR (FY)*						
Administration:						
A.	**Estimated total mental health expenditures for ADMINISTRATION for the entire duration of this INN Project by FY & the following funding sources:**	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
1	Innovative MHSA Funds	$ 53,625	$ 118,500	$ 103,500	$ 52,500	**$ 328,125**
2	Federal Financial Participation					$ -
3	1991 Realignment					$ -
4	Behavioral Health Subaccount					$ -
5	Other funding*					$ -
6	**Total Proposed Administration**	**$ 53,625**	**$ 118,500**	**$ 103,500**	**$ 52,500**	**$ 328,125**
Evaluation:						
B.	**Estimated total mental health expenditures for EVALUATION for the entire duration of this INN Project by FY & the following funding sources:**	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
1	Innovative MHSA Funds	**$ 68,750**	**$ 110,000**	**$ 110,000**	**$ 57,500**	**$ 346,250**
2	Federal Financial Participation					$ -
3	1991 Realignment					$ -
4	Behavioral Health Subaccount					$ -
5	Other funding*					$ -
6	**Total Proposed Evaluation**	**$ 68,750**	**$ 110,000**	**$ 110,000**	**$ 57,500**	**$ 346,250**
TOTAL:						
C.	**Estimated TOTAL mental health expenditures (this sum to total funding requested) for the entire duration of this INN Project by FY & the following funding sources:**	**FY18-19 9 months**	**FY19-20**	**FY20-21**	**FY21-22 6 months**	**Total**
1	Innovative MHSA Funds	$ 152,375	$ 603,500	$ 488,500	$ 240,000	**$ 1,484,375**
2	Federal Financial Participation					**$ -**
3	1991 Realignment					**$ -**
4	Behavioral Health Subaccount					**$ -**
5	Other funding*					**$ -**
6	**Total Proposed Expenditures**	**$ 152,375**	**$ 603,500**	**$ 488,500**	**$ 240,000**	**$ 1,484,375**
*If "Other funding" is included, please explain.						

INNOVATIVE PROJECT PLAN DESCRIPTION

County: Alameda **Date Submitted** 4.13.18

Project Name: Transitional Age Youth Emotional Emancipation Circles

I. Project Overview

1) Primary Problem

a) What primary problem or challenge are you trying to address?

African Americans are a historically inappropriately served population. The California Reducing Disparities project report on African Americans highlights the need to integrate their experiences and perspectives into the development and provision of services. Within Alameda County, African American young adults have identified the need to address isolation and to feel valued ethnically and culturally. From their input, Alameda County Behavioral Health Care Services has developed five aims, including providing supports that allow young adults to feel valued and connected to an inclusive community as a pathway to achieving independence and self-sufficiency. This Innovation project provides a model for this.

In FY2016-17, 6,188 young adults aged 18-30 received specialty mental health services from Alameda County Behavioral Health Care Services. Of these, 2,010 (32%) are African-American. African Americans often do not receive culturally responsive services. On a statewide level, the California Reducing Disparities Project report, *"We Ain't Crazy! Just Coping With a Crazy System" – Pathways into the Black Population for Eliminating Mental Health Disparities*, documents the many challenges African Americans experience in receiving appropriate services. Many of the key issues revolve around racism, stigma, marginalization, and isolation – in society and within mental health services. **Fundamentally, African Americans feel that their experiences and perspectives are not heard, respected or acted upon by the mental health system.**

Alameda County statistics reveal a similar pattern as statewide statistics:

- African American young adults (18-30) have an increased penetration rate:
  7.13% rate for African Americans versus 4.73% rate for White young adults (FY16-17)
- The impact of the services is less for African American young adults (18-30):
  After receiving on average more hours of outpatient services in 2016 (489 hours per African American client vs 383 hours for White clients), the African American clients showed less improvement from 2015 to 2017:
- The number of African American young adults using crisis services reduced 17%, while there was a 37% reduction for White young adults
- The number of African American young adults hospitalized reduced 12%, while there was a 37% reduction for White young adults.

These statistics speak to the lack of appropriateness of the services for the needs of the African American young adults. **Focusing time, energy and funding on developing new services that respond to the needs African Americans have identified and take into account the complexity of their experience – poverty, trauma, racism, etc. – is essential to reduce disparities.**

In Alameda County, an African American Utilization study was produced in 2011. This report defined young adults as ages 16-29 *due to patterns of delayed access to treatment for African Americans*. It identified the top two priorities for young adults as:

- **Decrease social isolation and marginalizing of African American young adults at risk for serious mental health issues due to social determinants.**
- **Provide culturally responsive treatment and services for those already being served in the young adult system of care.**

Young adults have identified discrimination, not feeling that the services are safe, lack of systems support, and lack of cultural diversity among service providers as reasons why they do not prioritize mental health in their journey of staying well. **They express the need to value one another, culturally and ethnically, despite the negative images communicated by the media or community.**

BHCS conducted a Results Based Accountability (RBA) process with young adult providers. Based on the input they heard from young adults, the process determined five key factors to better support them. **One of those factors is developing supports that allow them to feel valued and connected to an inclusive community as a pathway to achieving independence and self-sufficiency.** Community integration is considered a corner-stone of wellness and recovery. In addition, social connectedness and ethnic identity among racial minorities are also understood to impact mental health outcomes and functional outcomes for adolescents (Lamblin et al, 2017) (Phinney & Kohatsu, 1997). These influences contributed to the development of BHCS's key support factor.

b) Describe what led to the development and prioritization of the idea for your INN project

The data noted above speaks to the need to increase the availability of services that respond to the expressed needs of African American young adults. The California Reducing Disparities Project (CRDP) emphasizes the need for community-defined practices in order to be responsive to underserved communities. In addition, in Alameda's recent Community Planning Process for the MHSA Three Year Plan, there was significant interest in developing more peer-run program models under Innovation. The issue of "Social Isolation/Feeling Alone" among young adults was also identified as a problem by 60% of respondents. Additionally, young adults and the African American community were both identified by 44% of respondents as underserved populations. (www.ACMHSA.org under Documents/MHSA Plans).

Alameda County, along with many other counties, is challenged to appropriately serve African American clients, as well as effectively engage young adults. Alameda BHCS' core strategy is to act upon their input by providing supports that allow them to feel valued and connected to an inclusive community as a pathway to independence and self-sufficiency. Given Alameda County's experience with piloting a community-defined practice designed for the African American community, Emotional Emancipation Circles, it feels essential to continue developing this practice to respond to the expressed needs of African American young adults.

2) What Has Been Done Elsewhere To Address Your Primary Problem?

The primary challenge is to better serve African American young adults by respecting and acting upon their perspectives and expressed needs. Alameda BHCS has already identified a strategy based on their input: developing supports that allow young adults to feel valued and connected to an inclusive community as a pathway to achieving independence and self-sufficiency.

In considering potential services, programs included in the Substance Abuse and Mental Health Services Association database, the CRDP Black Population report, and other young adult focused services have been reviewed.

- The programs in SAMHSA generally focus on addressing a mental health or substance use problem, rather than the process of connection to community as a strategy that addresses a number of challenges.
- A popular approach to engaging young adults from underserved communities is to use arts, music and social media for them to express themselves. Some examples include San Diego's Urban Beats and Richmond's RYSE Center. While they do seem to be effective with engaging young adults, this program is looking to specifically address racism as an underlying contributor to African Americans feeling isolated and not valued.
- The CRDP report includes a few programs that specifically address community connection, such as Emotional Emancipation Circles (EECs), named Community Healing Circles at that time. Alameda has previously piloted EECs and received very positive feedback from young adults.

The Association of Black Psychologists (ABPsi) has identified a lack of practices that are responsive to the needs of African Americans. They have worked in collaboration with the Community Healing Network (CHN) to develop "Emotional Emancipation Circles" (EECs), a community defined practice. EECs are self-help support groups to address the impact of historical forces and ongoing racism, learn emotional wellness skills, heal through the valuing of the African American experience, and build a supportive community. There is a developed curriculum and training for EEC facilitators. Evaluation to date has mostly focused on participant satisfaction, although the Community Healing Network is working with the California Institute of Behavioral Health Solutions (CIBHS) to include an outcome evaluation.

In 2016, ABPsi and Alameda County BHCS ran a pilot program in which twenty (20) African American young adults became certified EEC facilitators. Four (4) of the trained young adults helped to run one EEC series (8 workshops). The facilitators and participants completed surveys and participated in a focused discussion about the experience. They indicated that they benefited from the experience and that it should continue. They also indicated that some of the format and approaches were not engaging for them as young adults. The areas they most felt needed to be added were:

- Age appropriate activities and mediums for addressing the Seven Keys curriculum
- Removing participation barriers (transport, schedule, etc.)
- Aligning housing, employment, education, wellness and community supports

This previous pilot effort also only evaluated satisfaction, not outcomes. In addition, further EECs were not conducted due to lack of allocated funds. Conducting EECs as an Innovation project will enable BHCS to include many more participants, **tailor the model for African American young adults' needs and interests** and **conduct an outcome evaluation** as a test of concept to lay the groundwork for the expansion of this model.

3) The Proposed Project

a) Provide a brief narrative overview description of the proposed project.

BHCS will tailor the EEC model to specifically target the needs of African American young adults, while ensuring fidelity to the model. Two EEC trainers who are ABPsi members will provide technical support for this. The implementation steps include:

1. Work with existing young adult EEC facilitators trained during the pilot project to host six (6) EEC information sessions to recruit young adults to participate in an EEC session;
2. Update the certification of 6-8 existing young adult EEC facilitators that commit to facilitating EECs. They will be provided stipends and other types of support to enable participation;
3. Work with the ABPsi members and the certified young adult trainers to *tailor* the curriculum to better serve the target population. Tailoring will include:
   - Having young adults co-facilitate the EECs;
   - Incorporating modes relevant to young adults, such as young adult independence development models, music and media, and a framing of the topics and activities to speak to their experiences and interests;
   - Incorporating components that address housing, education, employment and other needs, such as sharing of information and providing linkages;
   - Developing marketing to appeal to young adults;
   - Offering the sessions at times and places that fit their schedules, and
   - Developing appropriate evaluation tools.
4. Conducting six (6) EEC series for twenty (20) participants per series. A series is eight (8) 90-minute workshops or two (2) extended workshops covering the Seven Keys outlined in the EEC curriculum. Between each series adjustments will be made based on participant and facilitator feedback. Most likely there will be one female only, one male only, and four mixed gender series. Four (4) of the sessions will be offered once a week on a weekday and two (2) will be offered as two extended workshops on Saturdays. In addition, there are evaluation and graduation sessions.

Emotional Emancipation Circles℠ (EEC) are support groups designed for African American people to "work together to overcome, heal from, and overturn the lies of White superiority and Black inferiority." In the workshop series participants share their stories and feelings, learn about historical forces that have shaped their experiences, develop a healing and validating relationship with each other, learn wellness skills for living in a racist society, and learn to value themselves as African American individuals and as a people. The participants and facilitators can influence how the Seven Keys are covered as long as the essential curriculum is adhered to.
Participants will include young adults (18-30) in Alameda County who identify as African American/African Descent who experience or are at risk for mental illness. They will have a history of accessing mental health treatment services, mental health wellness services, or other relevant services, such as youth development centers, juvenile justice, and employment support.

b) Identify which of the three approaches specified in CCR, Title 9, Sect. 3910(a) the project will implement

This proposal makes a change to an existing practice in the field of mental health.

c) Briefly explain how you have determined that your selected approach is appropriate

EECs are a community-defined practice developed to address the lack of African American focused mental health service models. The first circle was conducted in 2007 in Connecticut by the Cultural Healing Network (CHN). By 2012, CHN and ABPsi had developed the EEC curriculum. At this point about 500 trainers have been certified in the United States, United Kingdom, Africa and elsewhere. EECs are a unique tool for supporting the development of racial and ethnic identity for African Americans as valued members of a community. While there is limited data on the impact of them, this project aims to evaluate the mental health impact for young adults.

4) Innovative Component

Tailoring EECs for young adults may expand the use of a community-defined practice within the mental health field. Innovation provides an opportunity to test the concept in two ways:

1) Tailor EECs to better engage and serve young adults: The current EEC format is more appropriate for older participants. By working with young adults to implement changes, while remaining true to the model, we can find best practices for appealing to and supporting young adults.

2) Evaluate mental health and functional outcomes: The current EEC evaluation process focuses on participant satisfaction. By expanding the scope of the evaluation we can determine if young adults felt engaged and if it resulted in mental health and functional outcomes.

5) Learning Goals / Project Aims

African Americans have been identified as an underserved/inappropriately served population by Mental Health Services Act. Many counties struggle with improving engagement of and services for African Americans. In addition, engaging young adults in services is a widespread challenge. A fundamental concern identified in the CRDP African American population report is that African American's do not feel that their experience and perspective is integrated into service development or provision. Based on African American young adult input, Alameda would like to test:

Can Emotional Emancipation Circles that are tailored for young adults result in participants feeling valued and connected to an inclusive community, contributing to independence and self-sufficiency?

Learning Goals

1. How can EECs be tailored to effectively engage young adults?
    - Tailoring EECs for young adults is one of the two changes being made in this project. It is essential to evaluate which strategies were effective in order to contribute to successful expansion or replication of this model.

2. Will participants in young adult EECs experience improved mental health and functional outcomes, specifically independence and self-sufficiency?
    - Mental health measurements will include emotional wellbeing, sense of self-worth and connectedness. Functional outcomes, such as independence and self-sufficiency, will include progress in education, employment, ability to access resources when needed, etc.
    - Expanding the evaluation of EECs to capture outcomes is one of the two changes being made in this project. In order to test if EECs contribute to key outcomes for young adults, specifically independence and self-sufficiency, this is a core learning goal.

6) Evaluation or Learning Plan

Learning Goals

1. How can EECs be tailored to effectively engage young adults?

Data to collect	Data collection method
• In what way were EECs tailored	Project Coordinator will track all ways the EECs were tailored for young adults
• How many young adults participated and for how much of the series	Sign in sheets will provide data on how many participants attended each workshop within a series
• Satisfaction with the services	Feedback will be gathered from facilitators and participants in survey and focus group format at the conclusion of each series to determine what elements assisted in engaging young adults

2. Will participants in young adult EECs experience improved mental health and functional outcomes, specifically independence and self-sufficiency?

Data to collect	Data collection method
• Changes in mental health	Conduct a survey and focus group at the end of each series, and three months later, with the participants to determine self-reported changes in mental health status, including the effects of the EEC on their sense of connectedness and self-worth. Participants will be asked to what extent and how the EECs contributed to changes in mental health. The evaluator will help identify, and adapt as needed, existing tools for measuring self-worth and connectedness.
• Changes in functioning	Conduct a survey and focus group at the end of each series, and three months later, with the participants to determine changes in functioning towards independence and self-sufficiency, including progress in pursuing education, employment, and other positive outcomes. Participants will be asked to what extent and how the EECs contributed to changes in functioning. Correlate changes in connectedness and self-worth with progress towards independence.

• Changes in service engagement	Conduct a survey and focus group at the end of each series, and three months later, with the participants to determine changes in service use patterns, such as accessing appropriate planned services.
• Improved quality of care	For those participants who are also BHCS clients, compare changes in their routine assessments and outcomes (3 months after completing the EEC) to comparable BHCS clients who did not participate in an EEC.

BHCS will engage a contractor to conduct the evaluation. This will include:
- Developing a final evaluation plan;
- Determining survey and focus group tools;
- Conducting the focus groups at the final workshop of each series, and
- Analyzing the survey and focus group data.

The evaluators will work closely with the young adults, staff, and trainers implementing this project to develop the plan, tools and analysis. They will document factors that might affect the outcomes and attempt to increase the validity of the results.

7) Contracting

The implementation of this project will be led by BHCS staff.

II. Additional Information for Regulatory Requirements

1) Certifications

2) Community Program Planning

The community planning process for the MHSA Three Year Plan was conducted from June–October 2017. During that process Alameda County BHCS staff provided updates and information on current MHSA programs and community members provided input on mental health needs and services. There were three modes for providing input:

- Five large community forums (one in each Supervisorial District)
- Eighteen focus groups were conducted throughout Alameda County: Chinese speaking family members, African American family members, providers for refugees, providers for LGBTQ community, transitional age youth (2), Afghan immigrants, older adults, API and refugee providers and advocates, providers for individuals with developmental disabilities and mental illness, and Pool of Consumer Champions (Alameda County's local consumer leadership group)
- Community Input Surveys in all threshold languages: submitted by 550 unique individuals. Respondents were very diverse in age, race, and ethnicity. Fifty percent of respondents were from Oakland, while they make up only 30% of Alameda's population. Survey respondents included: mental health consumers (12%), family members (10%), community members (12%),

education (2%), community mental health (13%), homeless/housing services (4%), county behavioral health (1%), faith-based (1%), community substance use services (1%), hospital/healthcare (4%), law enforcement (1%), NAMI (1%), veteran/veteran services (1%), other community services (4%), other/unknown (33%). Details of the process are provided in the MHSA Three Year Plan (www.ACMHSA.org under Documents/MHSA Plans).

The BHCS systems of care and BHCS Housing Department were asked to submit proposals that addressed the needs identified in the community planning process. The proposed projects were vetted by MHSA staff based on whether they addressed community priorities, as well as other factors. In 2011, the Alameda County African American Utilization study identified the top need for African American young adults as "Address social isolation and marginalization of young adults at risk for serious mental health issues due to social determinants." In addition, in Alameda's recent Community Planning Process for the MHSA Three Year Plan, there was significant interest in developing more peer-run program models under Innovation. The issue of "Social Isolation/Feeling Alone" among young adults was also identified as a problem by 60% of respondents. And, young adults and the African American community were both identified by 44% of respondents as underserved populations.

This proposal will be posted for public comment from April 13-May 13, 2018. On May 14, 2018 a public hearing will be held at 2pm at 500 Davis Street, San Leandro Conference Rooms A/B.
Substantive comments and responses will be included here.

3) Primary Purpose

Increase the quality of mental health services, including measurable outcomes

4) MHSA Innovative Project Category

Makes a change to an existing mental health practice that has not yet been demonstrated to be effective, including, but not limited to, adaptation for a new setting, population or community.

5) Population

a) *If your project includes direct services to mental health consumers, family members, or individuals at risk of serious mental illness/serious emotional disturbance, please estimate number of individuals expected to be served annually. How are you estimating this number?*

It is expected that one hundred and twenty (120) African American young adults experiencing or at risk for serious mental illness or emotional disturbance will be served by this project. There will be six (6) series with twenty (20) participants per series.

b) *Describe the population to be served, including relevant demographic information*

Participants will include young adults (18-30) who identify as African American/African Descent who experience or are at risk for mental illness.

c) *Does the project plan to serve a focal population or eligibility criteria*

Participants will include young adults (18-30) who identify as African American/African Descent who experience or are at risk for mental illness. More specific eligibility criteria will be established if needed.

6) MHSA General Standards

a) Community Collaboration: This project works closely with African American young adults to adapt and implement a service.
b) Cultural Competency: The model this project is based on was developed by and for African Americans. The implementation of it will be done by African American providers in collaboration with African American young adults. In addition, the project, evaluation plan, and results will be presented to the Cultural Competency Advisory Board (CABB), MHSA Stakeholder Committee and Alameda County African American Health and Wellness Steering Committee.
c) Client-Driven: African American BHCS clients will be involved in the development, implementation, and evaluation of this project. It is a peer-centered model that engages young adults as facilitators and interactive group participants.
d) Family-Driven: At the graduation event for each series, parents/family will be asked to provide feedback on what they saw in terms of the participants' experience and changes. This feedback will be considered in developing the next series.
e) Wellness, Recovery, and Resilience-Focused: This project aims to increase the independence and self-sufficiency of young adults experiencing or at risk for serious mental illness or emotional disturbance.
f) Integrated Service Experience for Clients and Families: This project does not specifically address integration of services.

7) Continuity of Care for Individuals with Serious Mental Illness

Participation in an EEC series is in addition to ongoing services provided for young adults with serious mental illness. Participants generally attend just one series, and therefore this program does not affect continuity of care.

8) INN Project Evaluation Cultural Competence and Meaningful Stakeholder Involvement.

a) *Explain how you plan to ensure that the Project evaluation is **culturally competent**.*

This project is focused on providing culturally competent services for African American young adults. The model is developed by and for African Americans. The African American young adult facilitators will participate in tailoring the model, implementing the program, ongoing quality improvement, and final evaluation of the project.

b) *Explain how you plan to ensure **meaningful stakeholder participation** in the evaluation.*

The African American young adult facilitators will participate in providing ongoing feedback about the program, developing the evaluation, and analyzing the resulting data.

9) Deciding Whether and How to Continue the Project Without INN Funds

BHCS will support the continuation of this project or components of this project based on a number of internal and external factors and processes including: 1) the evaluation results from the project, 2) support and buy-in from the Children/Youth/TAY and Adult Systems of Care and 3) recommendations from the MHSA Stakeholder Committee & the CCAB, and 4) available funding. MHSA Prevention and Early Intervention (PEI) and Community Services and Supports (CSS) funds will be considered for supporting these services.

10) Communication and Dissemination Plan

a) *How do you plan to disseminate information to stakeholders within your county and (if applicable) to other counties?*

Updates on the project will be provided to stakeholders on an ongoing basis via email and presentations at existing meetings. The final evaluation report for this project will be shared widely by posting it on the BHCS website and announcing via email to stakeholders, including to mental health directors, MHSA coordinators, and Ethnic Services Managers throughout California. In addition, presentations will be made to the MHSA Stakeholder Group, the Cultural Competency Advisory Board, consumer groups, NAMI, the Board of Supervisors, and the Alameda County African American Health and Wellness Steering Committee.

b) *How will program participants or other stakeholders be involved in communication efforts?*

The young adult facilitators will assist with sharing information about the program and outcomes, including outreaching to potential participants, developing social media posts, and participating in providing presentations to stakeholder meetings. The project coordinator will be responsible for website postings and email announcements. The Association of Black Psychologists and the Community Healing Network (CHN) will also disseminate information about the project to their members and stakeholders.

c) *KEYWORDS for search*

African American young adult healing; healing racial trauma; community connection for African American young adults; young adult Emotional Emancipation Circles

11) Timeline

a) *Specify the total timeframe (duration) of the INN Project:* **2 Years 6 Months**
b) *Specify the expected start date and end date of your INN Project:*
Start: October 2018 End: March 2021
c) *Include a timeline that specifies key activities and milestones*

Timeline	Activities/Milestones	Responsible
Oct-Nov 2018	Recruit existing young adult facilitators to participate Recruit PEER Project Coordinator Determine evaluator through RFP process	Project Administrator
Dec 2018	Peer Project Coordinator hired Outreach Plan developed Determine schedule/locations of all EECs Young adult facilitators certification updated	Project Administrator Project Coordinator Project Coordinator Lead Trainers
Jan 2019	Evaluation Plan developed and vetted Outreach for participants begins Begin tailoring of EECs for young adults	Evaluator Project Coord/Facilitators Project Admin/Coord/ Facilitators/Lead Trainers
Feb 2019	Continue tailoring of EECs for young adults	Project Admin/Coord
Mar 2019	Start EEC Series #1	Project Admin/Coord/ Facilitators/Lead Trainers
Apr-May 2019	Complete EEC Series #1 Graduation Celebration for EEC Series #1 Evaluation and debriefing of EEC Series #1	Project Admin/Coord/ Facilitators/Lead Trainers Evaluators
Jun 2019	Determine adjustments to activities and materials Prepare for EEC Series #2 Continue outreach	Project Admin/Coord/ Facilitators/Lead Trainers
Jul 2019	Start EEC Series #2	Project Admin/Coord/ Facilitators/Lead Trainers
Aug-Sep 2019	Complete EEC Series #2 Graduation Celebration for EEC Series #2 Evaluation and debriefing of EEC Series #2 Three month follow-up for Series #1	Project Admin/Coord/ Facilitators/Lead Trainers Evaluators Evaluators
Oct 2019	Determine adjustments to activities and materials Prepare for EEC Series #3 Continue outreach	Project Admin/Coord/ Facilitators/Lead Trainers
Nov-Dec 2019	Conduct EEC Series #3 (Saturdays) Graduation Celebration for EEC Series #3 Evaluation and debriefing of EEC Series #3 Three month follow-up for Series #2	Project Admin/Coord/ Facilitators/Lead Trainers Evaluators Evaluators
Jan 2020	Determine adjustments to activities and materials Prepare for EEC Series #4 Continue outreach	Project Admin/Coord/ Facilitators/Lead Trainers

Feb 2020	Start EEC Series #4	Project Admin/Coord/ Facilitators/Lead Trainers
Mar-Apr 2020	Complete EEC Series #4 Graduation Celebration for EEC Series #4 Evaluation and debriefing of EEC Series #4 Three month follow-up for Series #3	Project Admin/Coord/ Facilitators/Lead Trainers Evaluators Evaluators
May 2020	Determine adjustments to activities and materials Prepare for EEC Series #5	Project Admin/Coord/ Facilitators/Lead Trainers
Jun-Jul 2020	Conduct EEC Series #5 (Saturdays) Graduation Celebration for EEC Series #5 Evaluation and debriefing of EEC Series #5 Three month follow-up for Series #4	Project Admin/Coord/ Facilitators/Lead Trainers Evaluators Evaluators
Aug 2020	Determine adjustments to activities and materials Prepare for EEC Series #6 Continue outreach	Project Admin/Coord/ Facilitators/Lead Trainers
Sep 2020	Start EEC Series #6	Project Admin/Coord/ Facilitators/Lead Trainers
Oct-Nov 2020	Three month follow-up for Series #5 Complete EEC Series #6 Graduation Celebration for EEC Series #6 Evaluation and debriefing of EEC Series #6	Evaluators Project Admin/Coord/ Facilitators/Lead Trainers Evaluators
Dec 2020	Complete collection of evaluation data	Evaluator
Jan-Feb 2021	Analyze evaluation data with input from young adults and various committees Preliminary data shared with stakeholders to discuss continuing project Three month follow-up for Series #6	Evaluator Project Admin/Coord/ Facilitators/Lead Trainers Stakeholders Evaluator
Mar 2021	Evaluation report completed Disseminate Results Determine whether/how to continue project	Evaluator Project Administrator BHCS, stakeholders

This timeline includes evaluation throughout the project, beginning with vetting and finalizing and evaluation plan with the project committees and the CCAB; developing the evaluation tools with similar input; gathering preliminary data to make course corrections; gathering final data; and analyzing the data with the project committees. The last six months of the timeline allows time for data collection, analysis, dissemination, and the process to determine whether and how to continue the project. This work is feasible in this timeline because there will be efforts throughout the project to keep stakeholders informed and to consider sustainability plans.

12) INN Project Budget and Source of Expenditures

This INN Plan will use FY 10/11 funds that were deemed reverted back to the county of origin under **AB 114** to cover FY18-19 and FY19-20 expenses.

The funding for this project is for two purposes:

- To put a high level of focus on listening to and responding to the needs of African American young adults to tailor EECs as a potentially effective service. To date the African American community receives proportionally more BHCS services while experiencing lower outcomes. It will require additional investment to find solutions to these disparities.
- To evaluate whether and how EECs can be an effective service for African American young adults. This project runs six (6) cycles of EECs to allow for evaluation and quality improvement between each cycle.

A. Project Budget by Year - Narrative

Salaries

Project Administrator: $40,950 for 0.3 FTE including benefits. Project will be implemented for 9 months in first and last year.

Operating Costs

Total for EECs: $55,080
EECs are 8 short workshops or 2 extended workshops, 2 evaluation meetings, 1 graduation
There are 20 participants and 2 young adult facilitators at each workshop/meeting

Facilitator Stipends: $20/hour x 2 facilitators x 60 hours x 6 EECs = $14,400
Accessible meeting room for EECs: average $180/meeting x 60 meetings - $10,800
Food at EECs: 22 people per meeting x 54 meetings x $9/person = $11,880
Graduation: $500 for incidentals x 6 EECs = $3,000
Training Materials (handouts, booklets, etc.): $1500 x 6 EECs = $9,000
Participant/Facilitator Transport: $1000 x 6 EECs = $6000

Non-Recurring Costs

Culturally based displays and artifacts to establish the desired tone in the room that are re-used at each EEC.

Consultant Costs/Contractors

Lead Trainers (ABPsi): $200/hour x 2 lead trainers x 30 hours per year = $12,000.
Peer Project Coordinator: Contract with a young adult employer for $62,160 for a full year. Year 1 it will be an 8-month position and in Year 3 it will be a 9-month position.
Evaluator: $30,000 per year

Indirect

15% for county administration of the project. Applies to Personnel, Operating and Contract expenditures.

Expend by Fund Source – Narrative

Administration
50% of Project Administrator time
50% of Peer Project Coordinator time
Indirect expenses

Evaluation
50% of Project Administrator time
50% of Peer Project Coordinator time
50% of Lead Trainers time
Evaluator

Transitional Age Youth Emotional Emancipation Circles Budget

B. New Innovative Project Budget By FISCAL YEAR (FY)*					
EXPENDITURES					
	PERSONNEL COSTs (salaries, wages, benefits)	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
1	Salaries	$ 30,712	$ 40,950	$ 30,712	**$ 102,374**
2	Direct Costs				**$ -**
3	Indirect Costs	$ 4,607	$ 6,143	$ 4,607	**$ 15,357**
4	Total Personnel Costs	**$ 35,319**	**$ 47,093**	**$ 35,319**	**$ 117,731**
	OPERATING COSTs	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
5	Direct Costs	$ 9,180	$ 32,130	$ 13,770	**$ 55,080**
6	Indirect Costs	$ 1,377	$ 4,820	$ 2,066	**$ 8,262**
7	Total Operating Costs	**$ 10,557**	**$ 36,950**	**$ 15,836**	**$ 63,342**
	NON RECURRING COSTS (equipment, technology)	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
8	Workshop materials	$ 5,000			**$ 5,000**
9					**$ -**
10	Total Non-recurring costs	**$ 5,000**	**$ -**	**$ -**	**$ 5,000**
	CONSULTANT COSTS/CONTRACTS (clinical, training, facilitator, evaluation)	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
11	Direct Costs	$ 82,773	$ 103,160	$ 88,620	**$ 274,553**
12	Indirect Costs	$ 12,416	$ 15,474	$ 13,293	**$ 41,183**
13	Total Consultant Costs	**$ 95,189**	**$ 118,634**	**$ 101,913**	**$ 315,736**
	OTHER EXPENDITURES (please explain in budget narrative)	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
14					**$ -**
15					**$ -**
16	Total Other expenditures	**$ -**	**$ -**	**$ -**	**$ -**
BUDGET TOTALS					
Personnel (line 1)		**$ 30,712**	**$ 40,950**	**$ 30,712**	**$ 102,374**
Direct Costs (add lines 2, 5 and 11 from above)		**$ 91,953**	**$ 135,290**	**$ 102,390**	**$ 329,633**
Indirect Costs (add lines 3, 6 and 12 from above)		**$ 18,400**	**$ 26,436**	**$ 19,965**	**$ 64,801**
Non-recurring costs (line 10)		**$ 5,000**	**$ -**	**$ -**	**$ 5,000**
Other Expenditures (line 16)		**$ -**	**$ -**	**$ -**	**$ -**
TOTAL INNOVATION BUDGET		**$ 146,065**	**$ 202,676**	**$ 153,067**	**$ 501,808**

	C. *Expenditures By Funding Source and FISCAL YEAR (FY)*				
Administration:					
A.	**Estimated total mental health expenditures for ADMINISTRATION for the entire duration of this INN Project by FY & the following funding sources:**	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
1	Innovative MHSA Funds	$ 54,142	$ 77,491	$ 58,631	**$ 190,264**
2	Federal Financial Participation				**$ -**
3	1991 Realignment				**$ -**
4	Behavioral Health Subaccount				**$ -**
5	Other funding*				**$ -**
6	**Total Proposed Administration**	**$ 54,142**	**$ 77,491**	**$ 58,631**	**$ 190,264**
Evaluation:					
B.	**Estimated total mental health expenditures for EVALUATION for the entire duration of this INN Project by FY & the following funding sources:**	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
1	Innovative MHSA Funds	$ 71,742	$ 87,055	$ 74,666	**$ 233,463**
2	Federal Financial Participation				**$ -**
3	1991 Realignment				**$ -**
4	Behavioral Health Subaccount				**$ -**
5	Other funding*				**$ -**
6	**Total Proposed Evaluation**	**$ 71,742**	**$ 87,055**	**$ 74,666**	**$ 233,463**
TOTAL:					
C.	**Estimated TOTAL mental health expenditures (this sum to total funding requested) for the entire duration of this INN Project by FY & the following funding sources:**	**FY2018-19 9 months**	**FY2019-20 12 months**	**FY2020-21 9 months**	**Total**
1	Innovative MHSA Funds	$ 146,065	$ 202,676	$ 153,067	**$ 501,808**
2	Federal Financial Participation				**$ -**
3	1991 Realignment				**$ -**
4	Behavioral Health Subaccount				**$ -**
5	Other funding*				**$ -**
6	**Total Proposed Expenditures**	**$ 146,065**	**$ 202,676**	**$ 153,067**	**$ 501,808**
*If "Other funding" is included, please explain.					

INNOVATIVE PROJECT PLAN DESCRIPTION

County: Alameda **Date Submitted** 4.13.18

Project Name: Introducing Neuroplasticity to Mental Health Services for Children

I. Project Overview

1) Primary Problem

a) What primary problem or challenge are you trying to address?

Many children with emotional and behavioral disorders have underlying neurodevelopmental differences that exacerbate the emotional and behavioral disorders. Finding a way to provide neurodevelopmental interventions, in addition to mental health interventions, should lead to better mental health and functional outcomes.

The causes of emotional disturbance, neurodevelopmental disorders, and other challenges among youth are complex and interactive – a mix of genetic, experiential and physical environment factors. Trauma is one of the more studied causes of neurodevelopmental disorders. Adverse childhood experiences (ACEs) can cause significant neurodevelopmental and brain dysfunction, which can result in physical, cognitive, emotional and behavioral issues (Perry et al, 1995; Felitti et al, 1998). A study of over 17,000 adults revealed a strong positive relationship between ACEs and the increased likelihood of behavioral health issues, suggesting disordered brain functioning in response to child trauma (Anda et al., 2006).

A common example is a child who has experienced trauma develops a nervous system that functions in a high state of sympathetic response – flight/fight/freeze – that affects their emotions, behaviors, and ability to learn. Such a child is then diagnosed and treated based on their set of symptoms. If they are diagnosed with primarily a learning disorder, then they get one course of services. If they are diagnosed with primarily a mental health disorder they will be served within the mental health system. Unfortunately, **mental health practitioners are not trained to identify, nor treat, the neurodevelopmental disorders that may be contributing to the emotional and behavioral symptoms.** Mental health approaches focus on thoughts, emotions and behaviors to lower stress, and address symptoms of a child's diagnosis. It may help the child to manage the symptoms, but does not necessarily improve the underlying neurodevelopmental issues.

In FY2016-17, Alameda County Behavioral Health Care Services (BHCS) served 5,314 children ages 5-12 with serious emotional disturbance. In 2016, 4.2% of Alameda County school age children received special education services for emotional disturbance according to Lucile Packard's Foundation for Children's Health. There are approximately 155,000 students ages 5-12 in Alameda County public schools, therefore approximately 6,510 receive special education services due to emotional disturbance. In addition, approximately 15% of general education students in Alameda County are referred to MHSA PEI funded teams to identify the students' needs and coordinate services. That is 23,250 students identified by school staff as exhibiting behavioral/emotional issues. While there is no way to know how many of these students have neurodevelopmental weaknesses, we do know about 55% of the general public has experienced trauma, a leading cause of neurodevelopmental issues. In addition, trauma is

correlated with behavioral health issues, resulting in 90% percent of clients in public behavioral health care setting have experienced trauma (integration.samhsa.gov/clinical-practice/trauma).

b) Describe what led to the development of the idea for your INN project

In Alameda's recent Community Planning Process (CPP) for the MHSA Three Year Plan, the second priority identified for youth was addressing violence and trauma. MHSA Prevention and Early Intervention (PEI) programs currently provide some training to school staff to be better equipped to receive youth experiencing trauma. The Transition Age Youth (TAY) Full Service Partnership (FSP) also aims to provide trauma informed care. **In the CPP the community requested that Innovation try to find additional ways to address behavioral and emotional issues – whether related to trauma or not – in schools.** Currently, BHCS funds access and linkage programs at the school district level to implement Coordination of Services Teams (COST). These COST Teams are not assessing for neurodevelopmental weaknesses or strategies for strengthening neural pathways. However, many students have experienced different levels of community violence and trauma, which can lead to neurodevelopmental issues. Our current level of MHSA funded PEI services is missing this critical piece around neurodevelopmental issues and recovery from them.

Innovation offers a way to test an intervention before determining whether to formally integrate it into ongoing BHCS programs and practices. This INN project tests whether addressing underlying neurodevelopmental weaknesses can reduce mental health symptoms. If successful it could be widely integrated into existing school-based services.

2) What Has Been Done Elsewhere To Address Your Primary Problem?

BHCS staff have conducted research on the scientific framework of this project, as well as potential models through internet research and informational interviews. This research has focused on understanding the link between neurodevelopment and mental health for children, as well as models for addressing it.

- Christopher Gillberg has developed the neurodevelopmental comorbidity framework for multi-disciplinary assessment and intervention.
- The MIND Institute in Davis focuses on non-mental health diagnoses and, like Gillberg, incorporates a multi-disciplinary approach to assessment and intervention.
- Bruce Perry has looked at the relationship between trauma and neurodevelopmental changes.
- Rick Gaskill collaborates with Bruce Perry to educate about the neurodevelopmental impact of trauma, assessment protocols, and potential interventions.
- San Mateo Behavioral Health and Recovery Services began using the Neurosequential Model of Therapeutics (NMT) in their youth services in 2012. While there is limited evaluation data on the effect on emotional/behavioral outcomes, their experience supports its benefit. In 2016, San Mateo implemented an Innovation project to adapt these services for adults.

While the above work and Alameda's proposed project are based on the same brain research and intervention frameworks, the interventions are different. Gillberg and MIND's interdisciplinary approach requires a level of staffing not feasible in most settings. It is mainly used in specialty centers. NMT

certification in assessment and interventions is open only to clinical providers. None of the models have substantial data showing the impact of the services on mental health outcomes for children.

This Innovation project aims to provide neurodevelopmental interventions for youth experiencing moderate and serious mental health issues in an accessible manner. Unlike the models above, Holistic Approach to Neuro-Developmental Learning Efficiencies (HANDLE®) provides training for clinical and non-clinical providers in assessment and interventions.

3) The Proposed Project

a) Provide a brief narrative overview description of the proposed project.

This Innovation proposal integrates a neurodevelopmental approach into mental health services to achieve better outcomes. Holistic Approach to Neuro-Developmental Learning Efficiencies (HANDLE®) is a practice based on brain research on neuroplasticity and the effect of stress responses on learning, mood and behavior. It includes an initial assessment to determine inefficiencies in the communication between the body and the brain leading to functional difficulties. Based on that assessment a treatment plan is developed that specifies interventions to address the neurodevelopmental weaknesses. HANDLE does not teach coping mechanisms, it improves brain function, which ultimately reduces or eliminates the underlying neurodevelopmental problems contributing to emotional and behavioral symptoms.

Examples of interventions include:

- A child that skips the crawling stage of development may exhibit higher levels of clumsiness, an inability to focus, anxiety, frustration and ultimately hopelessness due to underdevelopment of the interconnections between the left and right hemispheres of the brain and interconnected neurodevelopmental systems. Activities, such as one that combines bouncing a ball in an intentionally rhythmic and repetitive manner, will recreate the neural connections that originally would have been developed during the child's crawling stage.
- A child diagnosed with PTSD due to physical abuse may be over- or under-sensitive to touch. This trauma expresses itself in learning difficulties and problematic behavior driven by the system's overreaction to physical contact. The child's brain has formed neural connections that interpret tactile sensation as a threat. A HANDLE treatment plan may include rolling a softball-sized ball along the child's arms to allow him to efficiently integrate sensory information from the tactile stimulation. By intentionally and repetitively creating appropriate stimuli in a safe environment, neural connections are formed, and the tactile sensation is reinterpreted by the brain as nonthreatening. The trained adults around him (parents, teachers) will interpret his behavior and respond to it more appropriately. Rather than a punitive or 'fix him' approach, they will find ways to create an environment that is safe internally and externally in which he can heal, connect, develop positive self-esteem, and diminish symptomatic behavior.

The program will include the following steps:

1) Identify participating schools sites and staff to receive HANDLE training. (Initial engagement and commitments have already been developed.)

2) Provide an overview training about HANDLE to approximately 50 BHCS youth services staff, staff from participating schools, and parents of BHCS clients or students at the participating schools. School staff may include teachers, teacher's aides, behavioral specialist, psychologists, physical therapists, occupational therapists, and others.

3) Provide training and certification for implementation partners:
    a. Student Aids (2 FTE, approximately 6 part-time positions): Aids will include parents of BHCS clients and students at participating schools, among others. Aids will be paid to provide the interventions for participating students. They will learn basic interventions during the overview training. Staff receiving Screener training will teach them additional interventions as needed.
    b. Screeners: Approximately 6 school staff and 3 BHCS staff will attend a 14-day training in conducting assessments and more specific interventions that takes place over two months. One school district has offered two schools sites and committed to the training requirements for participating staff (letter of support pending). Six of the screeners will later attend a 25-day training in more advanced assessments and interventions. This takes place over several months.

4) Implement assessment and intervention services.
    Students exhibiting emotional and behavioral problems not explained by intellectual or development disability will be identified by the school personnel. The parent(s) and teacher will be asked to complete a brief questionnaire and mark a checklist of concerns provided by HANDLE. Based on the results of the initial surveys, the children who meet criteria will be assessed by a trained Screener. The Screener will develop an intervention plan based on the neurological weaknesses identified. The Screener will meet with the student's caregiver and assigned Student Aid to review the intervention plan. The Student Aid will provide the intervention every school day for four months. For continuity of care for BHCS clients receiving these services, they will be screened by BHCS staff or the screeners will collaborate with BHCS staff. In year 2 and 3 of the project, students who received the initial 4 months of services can receive more advanced services if warranted.

5) Evaluate the effectiveness of the HANDLE interventions regarding emotional, behavioral and academic outcomes.

a) Identify which of the three approaches specified in CCR, Title 9, Sect. 3910(a) the project will implement.

This proposal applies a promising practice that has been successful in non-mental health contexts.

b) Briefly explain how you have determined that your selected approach is appropriate.

Neurosequential Model of Therapeutics (NMT) is based on the same brain research and frameworks as HANDLE. Some studies have found evidence of increased social-emotional development and improvements in problematic behavior in children receiving NMT (Barfield, Gaskill, Dobson, & Perry, 2012). In addition, San Mateo BHRS reports that among a sample of 10 youth receiving NMT assessments and NMT informed interventions, all showed improved self-regulation, and two-thirds

showed improvements in sensory integration, relational, and cognitive domain measures. **This provides reason to believe that HANDLE, which is based on the same framework, would produce positive emotional and behavioral outcomes.**

HANDLE is a promising practice in childhood neurodevelopment with limited implementation and evaluation. HANDLE practitioners are scattered across several continents, with twelve certified providers residing in California. While these HANDLE providers' experience is that this approach significantly assists individuals experiencing a variety of developmental, behavioral and emotional issues, the evaluation of the practice is limited and not mental health specific. Studies to date suggest functional improvements in individuals who experienced traumatic brain injury and increased behavioral/emotional stability in children with ADHD diagnosis and those in out of home placement with childhood trauma.

HANDLE offers a feasible way to provide neurodevelopmental services for children experiencing emotional and behavioral issues, without requiring clinical level services.

4) Innovative Component

Neurodevelopmental research is still an emerging area. The findings have recently become common curricula at university training programs for Masters in Social Work or Marriage and Family Therapy. Therapists currently working in the field are unlikely to have received any formal training in their master's degree programs in identifying and treating underlying neurodevelopmental issues that may be contributing to emotional and behavioral symptoms. While some mental health providers may have sought out training in this area, it is not a widely recognized approach. Integrating neurodevelopmental assessments and interventions into mental health services is a significant change to existing practice that may lead to improved outcomes for youth experiencing a wide variety of mental health issues.

5) Learning Goals / Project Aims

Alameda County aims to learn:

Can neurodevelopmental interventions provided in a non-clinical setting for youth with emotional and behavioral disorders reduce their symptoms and improve their functioning?

Learning Goals

1. Determine if implementing a neurodevelopmental approach to mental health changes the way educators and mental health providers understand children with emotional and behavioral disorders.
2. Determine if neurodevelopmental interventions, using the HANDLE model, with youth with emotional and behavioral disorders reduces their emotional and behavioral symptoms and academic outcomes.

Given that this project is implementing a model that has already been developed and implemented in non-mental health contexts, the core question is whether it improves mental health outcomes. In addition, a neurodevelopmental paradigm changes the understanding of emotional and behavioral

challenges. This can affect many aspects of how the children are treated, such as whether or not they are referred for the services, how schools handle discipline, etc.

6) *Evaluation or Learning Plan*

Learning Goals

1. Determine if implementing a neurodevelopmental approach to mental health changes the way educators and mental health providers understand children with emotional and behavioral disorders.

Data to collect	Data collection method
Who receives neurodevelopmental training	Project coordinator will track the number of people trained in each level of training, including their name and role (i.e., teacher, mental health provider, student aid, etc).
Who participates	Project coordinator will track which schools participate
Changes in attitudes, knowledge and behaviors	A survey and focus groups will be conducted at the conclusion of the project with staff from the participating schools and BHCS staff who received training. School staff will include those who received training and those who did not, as even without the training school staff might observe changes in the students receiving services. Data will be analyzed based on level of involvement (i.e.; trained, not trained but with students receiving services, no direct interaction).

2. Determine if neurodevelopmental interventions, using the HANDLE model, with youth with emotional and behavioral disorders reduces their emotional and behavioral symptoms and academic outcomes.

Data to collect	Data collection method
• Who receives the services	Project coordinator will keep records of students: - Referred for HANDLE assessment - Completing HANDLE assessment - Provided a HANDLE treatment plan - Provided HANDLE interventions, number/type of interventions In addition, if a youth referred for assessment did not receive services, the reason why will be recorded (i.e.; assessed as not appropriate for services, family declined service, etc).
• Change in neurodevelopment	- Participating students receive an initial assessment to determine eligibility and interventions. A post-test at the conclusion of services will be used to determine changes in neurodevelopment.

• Change in emotional or behavioral disorders	- Parent, school staff, teacher, and/or MH provider complete a measurement tool at the time of the assessment and at the conclusion of the services. A standardized, validated tool will be determined in consultation with the evaluators and include changes in mental health symptoms, emotional regulation, and behavioral consequences such as school discipline.
• Increase in student performance	- Teachers will complete a tool at the time student is referred for assessment and again at completion of services regarding attendance, reading and math levels, and other key indicators.

Evaluation of this project will be contracted out. The evaluators will assist in developing appropriate tools, finalizing the evaluation plan, gathering and analyzing the data. They will provide a data entry method and review data on a regular basis to ensure appropriate quantity and quality, and provide technical assistance as needed. They will document factors that might affect the outcomes, such as normal developmental changes and changes in the home. While those factors cannot be controlled for, the evaluation design will attempt to increase the validity of the results.

7) Contracting

The implementation of this project will be led by BHCS staff.

- MOUs will be developed between BHCS and participating schools before school staff participate in certification process to clarify certification, implementation, and data collection expectations. These MOUs will be monitored on an ongoing basis by BHCS project lead to ensure compliance or need for amending the agreement.
- Written agreements will be developed with BHCS staff prior to certification process regarding certification, implementation and data collection. These expectations will be part of their BHCS position on monitored by their supervisor and the project lead
- Written agreements will be developed with Student Aids prior to being hired regarding their scope of work. The project lead will meet regularly with Student Aids to provide supervision.

II. Additional Information for Regulatory Requirements

1) Certifications

2) Community Program Planning

The community planning process for the MHSA Three Year Plan was conducted from June – October 2017. During that process Alameda County BHCS staff provided updates and information on current MHSA programs and community members provided input on mental health needs and services. There were three modes for providing input:

- Five large community forums (one in each Supervisorial District)

- Eighteen focus groups were conducted throughout Alameda County: Chinese speaking family members, African American family members, providers for refugees, providers for LGBTQ community, transitional age youth (2), Afghan immigrants, older adults, API and refugee providers and advocates, providers for individuals with developmental disabilities and mental illness, and Pool of Consumer Champions (Alameda County's consumer leadership group)
- Input Surveys in all threshold languages: submitted by 550 unique individuals. Respondents were very diverse in age, race, and ethnicity. Fifty percent of respondents were from Oakland, while they make up only 30% of Alameda's population. Survey respondents included: mental health consumers (12%), family members (10%), community members (12%), education (2%), community mental health (13%), homeless/housing services (4%), county behavioral health (1%), faith-based (1%), community substance use services (1%), hospital/healthcare (4%), law enforcement (1%), NAMI (1%), veteran/veteran services (1%), other community services (4%), other/unknown (33%). Details of the process are provided in the MHSA Three Year Plan (www.ACMHSA.org under Documents/MHSA Plans).

The BHCS systems of care and BHCS Housing Department were asked to submit proposals that addressed the needs identified in the community planning process. The proposed projects were vetted by MHSA staff based on whether they addressed community priorities, as well as other factors. For example, "Community Violence and Trauma" was identified as the second top priority for youth. For Innovation, there were multiple suggestions to address behavioral issues and trauma related issues in school settings.

This proposal will be posted for public comment from April 13-May 13, 2018. On May 14, 2018 a public hearing will be held at 2pm at 500 Davis Street, San Leandro Conference Rooms A/B.
Substantive comments and responses will be included here.

3) Primary Purpose

Increase the quality of mental health services, including measurable outcomes

4) MHSA Innovative Project Category

Introduces a new application to the mental health system of a promising community-driven practice or an approach that has been successful in a non-mental health context or setting.

5) Population (if applicable)

a) If your project includes direct services to mental health consumers, family members, or individuals at risk of serious mental illness/serious emotional disturbance, please estimate number of individuals expected to be served annually. How are you estimating this number?

This project expects to serve 70 students each year, leading to approximately 200 students receiving intervention services over three years. This is based on the rates of behavioral health issues among

students and the likely participating schools. San Leandro Unified has committed to having two elementary schools participate. Hayward Unified and Castro Valley Unified are also interested in participating. Assuming 4 schools participate with a total population of 2,000 students (5-12 years old), approximately 19% (380) have behavioral/emotional issues including those in Special Ed due to emotional disturbance and those referred to PEI services. Of those 380 students, at least 55% (209) have experienced trauma, a leading cause of neurodevelopmental issues. So, we expect that at least 200 students at participating schools would be eligible for services in any given year. Due to program capacity, a portion of those children would be identified each year.

b) Describe the population to be served, including relevant demographic information.

This project is intended to serve students from 5-12 years old. Those youth and families reflect the diversity of Alameda County and therefore any client materials produced would be translated into all threshold languages.

c) Does the project plan to serve a focal population, e.g., providing specialized services for a target group, or having eligibility criteria that must be met? If so, please explain.

Students exhibiting emotional and behavioral problems not explained by intellectual or development disability will be identified by the school personnel. The parent(s) and teacher will be asked to complete a brief questionnaire and mark a checklist of concerns provided by HANDLE. Parent(s) would also complete a consent for participation. Based on the results of the initial surveys, the children who meet criteria will be assessed by a trained Screener to determine eligibility.

6) MHSA General Standards

a) Community Collaboration: This project relies on schools and parents to participate in developing, implementing and evaluating this project. The project coordinator will work closely with the schools and Student Aids to ensure that they are kept informed about program development and that their input guides the implementation.

b) Cultural Competency: The implementation plan will be presented to the BHCS Cultural Competency Advisory Board for input. The partner schools will be selected in part based on the student population in terms of race, ethnicity, and free and reduced lunch statistics to ensure underserved populations have access to these services. In addition, ensuring culturally and linguistically appropriate services will be a factor in selecting those to be trained in HANDLE.

c) Client-Driven: This project is focused on youth ages 5-12, so there will be limited client input into the project development.

d) Family-Driven: Family members will be among those recruited and paid to be trained in HANDLE and provide intervention services, as well as provide input on implementation and evaluation.

e) Wellness, Recovery, and Resilience-Focused: This project aims to help clients re-wire neuro-pathways to reverse underlying neurodevelopmental problems leading to emotional and behavioral symptoms – contributing to recovery.

f) Integrated Service Experience for Clients and Families: This project integrates traditional mental health services with a neurodevelopmental approach – which usually is only available to families that are in a position to seek out and pay for such services themselves. In addition, it provides the services within school settings, reducing the barriers to accessing the services.

7) Continuity of Care for Individuals with Serious Mental Illness

This project will serve some youth experiencing serious emotional disturbance. If for some reason the project is not sustained, trained BHCS providers can still provide assessments and train caregivers to provide the interventions, but there would not be Student Aids to provide the services.

8) INN Project Evaluation Cultural Competence and Meaningful Stakeholder Involvement.

*a) Explain how you plan to ensure that the Project evaluation is **culturally competent**.*

This project would aim to be culturally competent by:

- Selecting culturally and linguistically diverse providers, parents, and school staff to provide services as well as provide input on the program implementation and evaluation
- Presenting the implementation plan and evaluation plan and tools to the BHCS Cultural Competency Advisory Board for input

*b) Explain how you plan to ensure **meaningful stakeholder participation** in the evaluation.*

The schools and parent providers will be engaged throughout the process to provide input on the evaluation plan and tools. They will also participate in selecting Student Aids and be part of an ongoing committee to support integration of the program in a school setting.

9) Deciding Whether and How to Continue the Project Without INN Funds

BHCS will support the continuation of this project or components of this project based on a number of internal and external factors and processes including: 1) the evaluation results from the project, 2) support and buy-in from the Children's System of Care and 3) recommendations from the MHSA Stakeholder Committee & the CCAB, and 4) available funding. MHSA Prevention and Early Intervention (PEI) and Community Services and Supports (CSS) funds will be considered for ongoing funding of this project.

10) Communication and Dissemination Plan

a) How do you plan to disseminate information to stakeholders within your county and (if applicable) to other counties?

The participating schools will be responsible for disseminating results within their schools and to other schools. The project coordinator will be responsible for reaching other stakeholders and counties. Updates on the project will be provided to stakeholders on an ongoing basis via email and presentations at existing meetings. The final evaluation report for this project will be shared widely by posting it on the BHCS website and announcing via email to stakeholders, including to mental health directors, and MHSA coordinators throughout California. In addition, presentations will be made to the MHSA Stakeholder Group, the Cultural Competency Advisory Board, consumer groups, NAMI, the Board of Supervisors, and school communities.

b) *How will program participants or other stakeholders be involved in communication efforts?*

The participating schools will be responsible for sharing the results within their schools and with other schools, providing presentations to the organizations listed above, and forwarding email announcements to their stakeholders. The project coordinator will be responsible for website postings and email announcements.

c) *KEYWORDS for search: Please list up to 5 keywords or phrases for this project that someone interested in your project might use to find it in a search.*

Mental health and neurodevelopmental disorders; Neurodevelopmental interventions for mental health disorders; HANDLE

11) Timeline

a) *Specify the total timeframe (duration) of the INN Project:* **4 Years**
b) *Specify the expected start date and end date of your INN Project:*
Start: October 2018 End: September 2022
c) *Include a timeline that specifies key activities and milestones*

Timeline	Activities/Milestones
Oct-Dec 2018	Engage potential participating schools Develop training timeline
Jan-Mar 2019	Introductory training for schools, BHCS staff, parents, potential Student Aids Recruit potential Student Aids
Apr-Jun 2019	Confirm participating schools Develop MOUs with schools
Jul-Aug 2019	On-board Student Aids
Sept-Oct 2019	Screener training conducted
Nov 2019	Begin process of referring students for assessments for Year 1 Begin screening students for Year 1
Dec 2019	Begin intervention services for students by Student Aids for Year 1 Identify implementation issues with schools and make necessary changes
Jan-Mar	Referral and screening concludes

2020	Intervention services continue
Apr 2020	Intervention services conclude
May 2020	Gather post tests for Year 1
Jun-Aug 2020	Identify implementation issues with schools and make necessary changes for Year 2 Determine additional trainings needs for school, Student aids, etc. Confirm Student Aids for Year 2 Data analysis conducted by evaluators
Sept 2020	Implement additional trainings as needed Begin process of referring students for assessments for Year 2 Begin screening students Begin intervention services
Oct-Dec 2020	Continue screenings Continue intervention services Advanced training for 6 screeners conducted
Jan 2021	Conclude screenings Continue intervention services Advanced training for screeners concludes Identify children appropriate for advanced level of services
Feb-May 2021	Intervention services continue through April Begin advanced service assessments and services Gather post tests
Jun-Aug 2021	Identify implementation issues with schools and make necessary changes for Year 3 Confirm Student Aids for Year 3 Data analysis conducted by evaluators
Sept 2021	Begin process of referring students for assessments for Year 3 Begin screening students Begin intervention services, including advanced services
Oct-Dec 2021	Continue screenings Continue intervention services
Jan 2022	Conclude screenings Continue intervention services
Feb-Apr 2022	Intervention services continue through April Gather post tests, including for advanced services
May-Jun 2022	Preliminary report on outcomes Share outcome report with stakeholders Determine whether or not to continue the program and funding
Jul-Sept 2022	Final INN program report, share with stakeholders Finalize funding and plans to continue implementation if required

12) INN Project Budget and Source of Expenditures

This INN Plan will use FY2010-11 funds that were deemed reverted back to the county of origin under **AB 114** to cover FY18-19 and FY19-20 expenses.

Participating schools will be contributing in-kind staff time and resources to this project. At this time that contribution is not calculated in the budget.

A. Project Budget by Year - Narrative

Salaries

FY18-19: 9 months (Oct-Jun) Program Manager (0.42 FTE) at $159,417 annual salary and benefits

FY19-20: Program Manager (0.625 FTE) at $159,417 annual salary and benefits

Clinician II (0.5 FTE) at $147,858 annual salary and benefits

FY20-21: Program Manager (0.625 FTE) at $159,417 annual salary and benefits

Clinician II (0.75 FTE) at $147,858 annual salary and benefits

FY21-22: Same as FY20-21

FY22-23: 3 months (Jul-Sep) incurs no additional costs for disseminating report and finalizing continuation of the project as appropriate

Operating Costs

Substitute teacher time to cover for teacher's attending training.
$170/day x 10 days x 6 teachers x 3 school districts = $30,600.
FY19-20 and FY20-21

Supplies/Incentives: Office supplies. $5500 total.
Snacks and reward incentives for participating children. $5000 total.
HANDLE materials: $2500 total.
Mileage: BHCS staff travel to schools. $6000 total.

Consultant Costs/Contractors

Student Aids: 2 FTE aids to provide daily interventions.
$93,082/yr each. FY19-20 through FY21-22.

Evaluator: $30,000 per year. FY19-20 through FY21-22.

HANDLE Trainer: $45,000 FY19-20. $90,000 FY20-21.

Indirect

15% for county administration of the project. Applies to Personnel, Operating and Contract expenditures.

Expend by Fund Source – Narrative

Administration

50% of Program Manager time
Indirect expenses

Evaluation

50% of Program Manager time
Evaluator

Introducing Neuroplasticity to Mental Health Services for Children Budget

B. New Innovative Project Budget By FISCAL YEAR (FY)*						
EXPENDITURES						
	PERSONNEL COSTs (salaries, wages, benefits)	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
1	Salaries	$ 50,216	$ 173,565	$ 210,530	$ 210,530	**$ 644,841**
2	Direct Costs					**$ -**
3	Indirect Costs	$ 7,532	$ 26,035	$ 31,580	$ 31,580	**$ 96,726**
4	Total Personnel Costs	**$ 57,748**	**$ 199,600**	**$ 242,110**	**$ 242,110**	**$ 741,567**
	OPERATING COSTs	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
5	Direct Costs		$ 38,350	$ 36,850	$ 5,000	**$ 80,200**
6	Indirect Costs	$ -	$ 5,753	$ 5,528	$ 750	**$ 12,030**
7	Total Operating Costs	**$ -**	**$ 44,103**	**$ 42,378**	**$ 5,750**	**$ 92,230**
	NON RECURRING COSTS (equipment, technology)	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
8						**$ -**
9						**$ -**
10	Total Non-recurring costs	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	CONSULTANT COSTS/CONTRACTS (clinical, training, facilitator, evaluation)	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
11	Direct Costs		$ 261,164	$ 306,164	$ 216,164	**$ 783,492**
12	Indirect Costs	$ -	$ 39,175	$ 45,925	$ 32,425	**$ 117,524**
13	Total Consultant Costs	**$ -**	**$ 300,339**	**$ 352,089**	**$ 248,589**	**$ 901,016**
	OTHER EXPENDITURES (please explain in budget narrative)	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
14						**$ -**
15						**$ -**
16	Total Other expenditures	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	BUDGET TOTALS					
	Personnel (line 1)	**$ 50,216**	**$ 173,565**	**$ 210,530**	**$ 210,530**	**$ 644,841**
	Direct Costs (add lines 2, 5 and 11 from above)	**$ -**	**$ 299,514**	**$ 343,014**	**$ 221,164**	**$ 863,692**
	Indirect Costs (add lines 3, 6 and 12 from above)	**$ 7,532**	**$ 70,962**	**$ 83,032**	**$ 64,754**	**$ 226,280**
	Non-recurring costs (line 10)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	Other Expenditures (line 16)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	TOTAL INNOVATION BUDGET	**$ 57,748**	**$ 544,041**	**$ 636,576**	**$ 496,448**	**$ 1,734,813**

C. *Expenditures By Funding Source and FISCAL YEAR (FY)*						
Administration:						
A.	**Estimated total mental health expenditures <u>for ADMINISTRATION</u> for the entire duration of this INN Project by FY & the following funding sources:**	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
1	Innovative MHSA Funds	$ 32,640	$ 154,685	$ 165,225	$ 151,537	**$ 504,087**
2	Federal Financial Participation					**$ -**
3	1991 Realignment					**$ -**
4	Behavioral Health Subaccount					**$ -**
5	Other funding*					**$ -**
6	**Total Proposed Administration**	**$ 32,640**	**$ 154,685**	**$ 165,225**	**$ 151,537**	**$ 504,087**
Evaluation:						
B.	**Estimated total mental health expenditures <u>for EVALUATION</u> for the entire duration of this INN Project by FY & the following funding sources:**	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
1	Innovative MHSA Funds	$ 25,108	$ 116,783	$ 116,783	$ 116,783	**$ 375,457**
2	Federal Financial Participation					**$ -**
3	1991 Realignment					**$ -**
4	Behavioral Health Subaccount					**$ -**
5	Other funding*					**$ -**
6	**Total Proposed Evaluation**	**$ 25,108**	**$ 116,783**	**$ 116,783**	**$ 116,783**	**$ 375,457**
TOTAL:						
C.	**Estimated TOTAL mental health expenditures (this sum to total funding requested) for the entire duration of this INN Project by FY & the following funding sources:**	**FY2018-19 9 months**	**FY2019-20**	**FY2020-21**	**FY2021-22**	**Total**
1	Innovative MHSA Funds	$ 57,748	$ 544,041	$ 636,576	$ 496,448	**$ 1,734,813**
2	Federal Financial Participation					**$ -**
3	1991 Realignment					**$ -**
4	Behavioral Health Subaccount					**$ -**
5	Other funding*					**$ -**
6	**Total Proposed Expenditures**	**$ 57,748**	**$ 544,041**	**$ 636,576**	**$ 496,448**	**$ 1,734,813**
*If "Other funding" is included, please explain.						

APPENDIX A.

MEMORANDUM

To: Kate Jones

From: Mary Skinner

Re: MET Transport Challenges and Recommendations

A. Transportation Challenges for MET

The challenge of providing relief to MET members waiting for transport for persons having a mental crisis revolves around the use of an ambulance. Ambulances may take some time to arrive because medical emergencies take priority. Not only is the person having the mental crisis waiting in the back of a police vehicle, the on scene officers are spending considerable time waiting. These wait times heightens stress and create stigma to an already difficult situation for those involved.

Three facets of California's current EMS statutes and regulations impede the development and implementation of most EMS/paramedicine programs:

1. The requirement that callers to 911 must be taken to an acute care hospital having a basic or comprehensive ED (Health & Safety Code Division 2.5, section 1797.52).

2. The locations where paramedics can practice — i.e., at the scene of a medical emergency, during transport to an acute care hospital with a basic or comprehensive emergency department, during inter-facility transfer, while in the ED of an acute care hospital until responsibility is assumed by hospital staff, or while working in a small and rural hospital pursuant to sections 1797.52, 1797.195, and 1797.218 (California Code of Regulations [CCR], title 22, section 100145, and Health & Safety Code 2.5, section 1797).

3. The specification of the paramedic scope of practice. Specific procedures and medications approved for use are contained in regulation (CCR, title 22, section 100145 and Health & Safety Code 2.5, section 1797).

Paramedics have a larger scope of practice that is designed to assist with significant medical and trauma related conditions that are rarely needed by patients with an acute mental health crisis.

Despite a more limited scope of practice, EMT's don't have the same restrictions and can transport patients to a variety of institutions (Emergency departments, PES, sobering centers, unlocked CIU's, residential crisis beds, clinics)

There are many cities and counties that have same or similar programs as Alameda County's MET. However, the most glaring difference is that they do not require an ambulance for transportation, nor do they have regulations precluding use of a paramedic for transportation to a facility that is not an "acute care hospital". Unless there is a medical need, individuals are transported directly by the law enforcement

officers who are members of the mobile crisis program, or by the clinician/peer team member. Cities/counties commonly use unmarked vehicles or what one referred to as the "therapeutic transport team". (All transports required referrals to the receiving facility.)

This doesn't discount there are city and counties struggling with the obligation of transporting psychiatric patients in ambulances. Their struggle is the same as Alameda County. The ambulance takes time away from answering medical emergencies, and the ambulance creates a stigma for the person in crisis. Allina Health, which owns Abbott Northwestern and 11 other hospitals statewide in Minnesota, now keeps an unmarked Ford Escape among its fleet of ambulances at its emergency medical base in Mounds View, a city considered part of Twin Cities Metropolitan Area.

The state of Minnesota has been struggling with the same issues of transporting persons having a mental health crisis. There, the issue surrounding wait time is transport may take hours not only because of responding to medical emergencies, but because facility locations can be miles away. Some as far as a three hour drive. Minnesota Legislature created a special class of non-emergency transports under state law. Advocacy groups are trying to include non-emergency transport as a reimbursable expense under Medical Assistance, Minnesota's version of Medicaid because many of these transports go unpaid.

There are other cities/counties/states that use non-emergency vehicles. Atlanta is one such city. Their vehicles are vans with a partition so patients are separated from the driver. The most unique is the state of Tennessee. Under TN state law, a sheriff or third party designated by the sheriff may make the transport for an involuntary admission. Though this doesn't sound unique, the waiting time is: by law, the receiving facility is notified and given an estimated time of arrival; if the sheriff or agent arrives within the stated time frame, the sheriff or agent waits no longer than 1 hour and 45 minutes for evaluation; if they do not arrive in the stated time, then they must stay at the facility for the duration. This law does not apply to counties with more than 600,000 people. Here, they only have to deliver the person to the facility. No waiting involved.

B. EMT inclusion/replacement within MET

Although there are no mobile crisis team models which is EMT and clinician based responding on scene, Charleston, South Carolina (area covered encompasses two counties: Charleston and Dorchester) is rolling out a program which will be EMS and telehealth based. The model is basically an EMT using a video type service (much akin to Skype, Facetime, etc.) that is HIPPA compliant to consult with the clinician on duty while the EMT is on scene. The EMT will then be able to transport, if necessary, the person to a facility or other services that may be required. Charleston-Dorchester's model is interesting not only because of its EMT usage, but the coverage area, approximately 545,000 people, is spread out across two counties (approximately 1,937 square miles). They also have the majority of mental health crisis contacts in one area, North Charleston, just as Oakland encompasses the majority of Alameda County's contacts.

Charleston-Dorchester's roll out begins the week of March 27th. The Director of Special Operations, Melissa Camp, has agreed to share information regarding "lessons learned" as the pilot program progresses.

A close second model is in the state of North Carolina. NC's model is called Community Paramedicine Behavioral Health Crisis Response which began in 2013. In response to overwhelmed EDs and rules that EMS agencies would not be able to bill unless the patient went to the ED, the state decided more effective strategies were needed. Regional mental health authorities

and communities provided developed advanced training for EMS departments and their paramedics. The EMS personnel now obtain specialized training for treating mental illness and substance use to assist in diverting individuals in mental health crisis from hospital EDs to other facilities. EMS staff consult with a doctor before bypassing ED. WakeBrook Crisis Center in Raleigh (Wake County) redirected 250 patients away from the ED saving 3,400 ED bed hours. Wake EMS was on track to redirect more than 320 patients in 2013.[1]

In CA, Stanislaus County is doing a pilot program modeled on North Carolina. The program focuses on Medi-Cal and uninsured patients though it includes insured and Medicare patients. Stanislaus obtained an approval from OSHPD (Office of Statewide Health Planning and Development) because CA law prohibits EMS from transporting patients to alternate facilities and places limitations on an EMS' scope of practice. Here, the community paramedic is called per request of the ambulance EMS, or police. If patient requires transport, an ambulance is used. The evaluation report for first-year results is due in 2017. (See Attachment A for One Page Notes)

C. Recommendations to EMT Preclusions

In order for EMS personnel to be used to improve transportation challenges and EMS assisting MET, an amendment to Health & Safety Code Division 2.5 and California Code of Regulations, Title 22, Division 9: Prehospital Emergency Medical Services (See Attachment B for codes) would need to be amended. One of the hopeful outcomes from the Stanislaus County pilot program is a change in legislation.

Alameda County could apply to OSHPD under a Health Workforce Pilot Projects (HWPP) Program. This is the program Stanislaus County obtained approval for their pilot program. The programs allows organizations to test, demonstrate, and evaluate new or expanded roles for healthcare professionals or new healthcare delivery alternatives before changes in licensing laws are made by the legislature. However, the review process could take up to or more than six months and there is no guarantee for approval.

Another possibility is instead of an EMT, using a nurse practitioner in the same role. There are no statutes or regulations that limit the scope of practice on nurses as specifically as the EMT regulations do. Although an NP has extended training and medical knowledge over an EMT, an EMT's skill set for direct community interaction, especially exposure to persons with mental health crisis, may be greater. (Note: NPs are merely being suggested because they were used in a successful San Francisco program begun in 2004 and ended in 2009 due to lack of funds. See Attachment C)

D. Optional Recommendation: Psychiatric Advance Directives (PAD)

The National Alliance on Mental Illness' position is that "PADs should be considered as a way to empower consumers to take a more active role in their treatment, and as a way to avoid conflicts over treatment and medication issues." Proponents suggest that PADs:

- promote autonomy
- foster communication between patients and treatment providers
- increase compliance with medication
- reduce involuntary treatment and judicial involvement.[2]

PADs improve psychiatric and recovery-oriented outcomes by empowering consumers with serious mental illness to take an active role in their own care.[3] In the spirit of increasing satisfaction with clients, an Advance Directive can be a measure of empowerment to clients because they are involved in their treatment choices when it is found they are incapable of making healthcare decision. Psychiatric patients having a joint crisis or advanced directive plan compared to a group of psychiatric patients without a plan showed a reduction in compulsory admissions and treatment, 13% and 27% respectively.[4] A similar study with patients who developed advanced directives without assistance from the outpatient health team were compared to patients without a PAD.[5] No difference was found in the number of psychiatric hospital admissions. These two studies suggests a positive impact of a joint advanced directive plan developed by the patient and his or her outpatient treatment team on hospital admission outcomes.

The CalMHSA article "*Recovery Focused Hospital Diversion and Aftercare…*" states Marin County has a crisis residential program which includes assistance for people to develop crisis plans. In Marin County, a person with lived experience in the mental health system facilitates the development of Advance Directives as a component of this program.[6] However, at the time of this writing, I have been unable to confirm they use PADs and if they do, what is their protocol. Otherwise, there are no other cities who have incorporated PADs into their follow ups.

Although no cities/counties use PADs in follow ups, there are a few states that use a state registry that file PADs either with the Secretary of State or with the state's division of mental health (New Jersey has such a registry). Registry access is generally given only to the directive holder, then persons the holder has given permission to access the registry. However, two states, New Jersey and Washington, have their registry accessible to both health and mental health providers.

California has a registry for advance directives. It does not accept PADs. Accordingly, the directive holder should keep a copy; an additional copy sized for a wallet; copy to their PAD agent; and mental health facilities and programs they may access. It is also suggested to give a copy to a trusted friend or family member.

How effective PADs would be for marginalized community members is unknown. However, the studies show promise in their usage, and discussion of availability may bring empowerment to a disenfranchized population.

[1] http://www.northcarolinahealthnews.org/2013/11/08/mental-health-crisis-initiative-announced/

[2] National Alliance on Mental Illness. Psychiatric advance directives. http://www.nami.org/Template.cfm?Section=Issue_Spotlights&Template=/Tagg....

[3] Swanson JW, Tepper M, Backlar P et al. Psychiatric advance directives: an alternative to coercive treatment? Psychiatry 2000; 63:160-72.

[4] Henderson C, Flood C, Leese M, Thornicroft G, Sutherby K, Szmukler G. Effect of joint crisis plans on use of compulsory treatment in psychiatry: single blind randomized controlled trail. BMJ. 2004; 329:136–138.

[5] Papageorgiou A, King M, Janmohamed A, Davidson O, Dawson J. Advance directives for patients compulsorily admitted to hospital with serious mental illness. Brit J Psychiatry. 2002; 181:513–519.

[6] CalMHSA, Recovery Focused Hospital Diversion and Aftercare – Transformation in Services Will Equal Transformation in Lives, June 2015, Pub #CM62.01; 34.

ATTACHMENT A
(This is an excerpted page from the Overview)

Illustration by Ruben DeLuna

In response to a 911 call, community paramedics transport patients with behavioral health needs, but no emergent medical needs, to a mental health crisis center instead of to an emergency department (ED).

Results (as of September 30, 2016)

- 98% of patients were evaluated at the behavioral health crisis center without the long delay of a preliminary ED visit.
- Less than 3% of patients required subsequent transfer to the ED, and there were no adverse outcomes. After refining the field medical evaluation protocols, the rate of transfer to an ED fell to zero.
- The project yielded savings for payers, primarily Medi-Cal, because screening behavioral health patients in the field for medical needs and transporting them directly to the mental health crisis center obviated the need for an ED visit with subsequent transfer from an ED to a behavioral health facility.
- For uninsured patients, the amount of uncompensated care provided by ambulance providers and hospitals also decreased.

How It Works

Many California EDs are overcrowded. Some of the patients served in an ED could be treated safely and effectively in other settings, including some who arrive via ambulance.

Behavioral health patients are often transported to an ED for medical clearance or when there is no capacity to evaluate them at a crisis center. These patients can spend hours in an ED waiting for medical clearance, and in some cases they can spend days in the ED waiting for a bed at an inpatient behavioral health center, without getting definitive behavioral health care during their ED stay.

In Stanislaus County, community paramedics are dispatched in response to 911 calls that a dispatcher determines to be a behavioral health emergency or when another paramedic or a law enforcement officer identifies a patient with mental health crisis center to assess patients who arrive on their own and who need to be medically cleared before being admitted to the county's inpatient psychiatric facility. The community paramedics provide these services as needed in addition to responding to traditional 911 calls.

Once on scene, a community paramedic assesses the patient for medical needs or intoxication due to alcohol or drug consumption. If the patient has no emergent medical needs, is not intoxicated, and is not violent, the community paramedic contacts the mental health crisis center to determine bed availability at the county inpatient psychiatric facility. Upon a patient's arrival, mental health professionals on the crisis center staff evaluate the patient to determine the most appropriate level of care for their condition. Eligibility is limited to nonelderly adults who are uninsured or enrolled in Medi-Cal because the county inpatient psychiatric facility does not accept patients with other health

behavioral health needs. Community paramedics are also dispatched to the insurance.

Partners

LOCAL EMS AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNER	EMS PROVIDER PARTNER	LOCATION
Stanislaus County	Mountain Valley EMS	Stanislaus County Behavioral Health and Recovery Services	AMR Stanislaus County	Stanislaus County

ATTACHMENT B

California Health and Safety Code Division 2.5

§1797.52. (Advanced Life Support) "Advanced life support" means special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of a local EMS system at the scene of an emergency, during transport to an acute care hospital, during interfacility transfer, and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital. (*Amended by Stats. 1984, Ch. 1391, Sec. 4.*)

§100145. Scope of Practice of Paramedic.

(a) A paramedic may perform any activity identified in the scope of practice of an EMT-I in chapter 2 of this division, or any activity identified in the scope of practice of an EMT-II in chapter 3 of this division.

(b) A paramedic shall be affiliated with an approved paramedic service provider in order to perform the scope of practice specified in this Chapter.

(c) A paramedic student or a licensed paramedic, as part of an organized EMS system, while caring for patients in a hospital as part of his/her training or continuing education under the direct supervision of a physician, registered nurse, or physician assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, or while working in a small and rural hospital pursuant to section 1797.195 of the Health and Safety Code, may perform the following procedures or administer the following medications when such are approved by the medical director of the local EMS agency and are included in the written policies and procedures of the local EMS agency.

(1) Basic Scope of Practice:

(A) Perform defibrillation and synchronized cardioversion.
(B) Visualize the airway by use of the laryngoscope and remove foreign body(-ies) with forceps.
(C) Perform pulmonary ventilation by use of lower airway multi-lumen adjuncts, the esophageal airway, and adult oral endotracheal intubation.
(D) Institute intravenous (IV) catheters, saline locks, needles, or other cannulae (IV lines), in peripheral veins and monitor and administer medications through pre-existing vascular access.
(E) Administer intravenous glucose solutions or isotonic balanced salt solutions, including Ringer's lactate solution.
(F) Obtain venous blood samples.
(G) Use glucose measuring device.
(H) Perform Valsalva maneuver.
(I) Perform needle cricothyroidotomy.
(J) Perform needle thoracostomy.
(K) Monitor thoracostomy tubes.
(L) Monitor and adjust IV solutions containing potassium, equal to or less than 20 mEq/L.
(M) Administer approved medications by the following routes: intravenous, intramuscular, subcutaneous, inhalation, transcutaneous, rectal, sublingual, endotracheal, oral or topical.
(N) Administer, using prepackaged products when available, the following medications:
1. 25% and 50% dextrose;

2. activated charcoal;
3. adenosine;
4. aerosolized or nebulized beta-2 specific bronchodilators;
5. aspirin;
6. atropine sulfate;
7. bretylium tosylate;
8. calcium chloride;
9. diazepam;
10. diphenhydramine hydrochloride;
11. dopamine hydrochloride;
12. epinephrine;
13. furosemide;
14. glucagon;
15. midazolam;
16. lidocaine hydrochloride;
17. morphine sulfate;
18. naloxone hydrochloride;
19. nitroglycerine preparations, except intravenous, unless permitted under (c)(2)(A) of this section;
20. sodium bicarbonate; and
21. syrup of ipecac.

(2) Local Optional Scope of Practice:

(A) Perform or monitor other procedure(s) or administer any other medication(s) determined to be appropriate for paramedic use, in the professional judgement of the medical director of the local EMS agency, that have been approved by the Director of the Emergency Medical Services Services Authority when the paramedic has been trained and tested to demonstrate competence in performing the additional procedures and administering the additional medications.

(B) The medical director of the local EMS agency shall submit Form #EMSA-0391 dated 1/94 to, and obtain approval from, the Director of the EMS Authority in accordance with section

ATTACHMENT C

Case Study 1

San Francisco Program to Address the Needs of Chronic Inebriates

San Francisco developed a program to appropriately address the needs of chronic inebriates — The San

Francisco Fire Department (SFFD) Homeless Outreach & Medical Emergency (HOME) Team. The program was developed in response to a small number of individuals who were chronic inebriates that frequently called 911, had extensive ED use, and incurred high uncompensated health care costs.

The San Francisco HOME Team was designed to connect at-risk individuals with a system of care to better serve their needs and to stop the unproductive cycle of ambulance transports and hospital stays. Analysis by the HOME Team found that heavy EMS system users are typically 40- to 60-year-old homeless male chronic inebriates who have comorbid mental illness and medical conditions, and high mortality rates. Prior to this program, San Francisco General Hospital estimated a total of $12.9 million in annual uncompensated charges associated with 225 frequent users.

The HOME Team program started in October 2004 under the SFFD EMS through a joint effort of SFFD, San Francisco Department of Public Health, and San Francisco Human Services Agency. The team was led by one paramedic captain and included intensive case managers or outreach workers as well as nurse practitioners. Typical response involved outreach to find all frequent users, connect them to community-based care (typically, substance abuse treatment and medical detoxification), and advocate for long term care when necessary. The program was able to develop a web of resources and partners including case workers, mental health professionals, primary care providers, housing resources, substance abuse treatment programs, and law enforcement. These partners came together to create and evaluate systems of care for the frequent users. This clinical planning brought forth new long term care placement options for dual diagnosis patients with both mental health and substance abuse conditions, including locked programs and boarding programs with care management. Over an 18-month period, there were reductions in ambulance activity for high users and a decrease in ED diversion rates at local hospitals. The HOME Team was funded by the San Francisco Department of Public Health at approximately $150,000 annually; however, funding was rescinded due to the department having other budget priorities, and the program has been on hiatus since June 2009.

(Source: *The San Francisco Fire Department HOME Team: An Urban Community Paramedic Pilot Project,* presentation by Captain Niels Tangherlini, June 27, 2012. [Cited from *Community Paramedicine: A Promising Model for Integrating Emergency and Primary Care*, Kizer, K. W.; Shore, K.; Moulin, A.; July 2013.])

APPENDIX B.

Alameda County EMS 5150 Transports 2017						
	Emergency Department Destination		Psychiatric Facility Destination		Grand Total	
Response City	Distinct count of Arrived at Hospital	% of Total Distinct count of Arrived at Hospital along Table (Down)	Distinct count of Arrived at Hospital	% of Total Distinct count of Arrived at Hospital along Table (Down)	Distinct count of Arrived at Hospital	% of Total Distinct count of Arrived at Hospital along Table (Down)
Oakland	2,762	37.0%	2,537	47.8%	5,299	41.5%
Hayward	754	10.1%	588	11.1%	1,342	10.5%
Berkeley	764	10.2%	535	10.1%	1,299	10.2%
San Leandro	660	8.8%	546	10.3%	1,206	9.4%
Fremont	709	9.5%	166	3.1%	875	6.9%
Alameda	217	2.9%	232	4.4%	449	3.5%
Livermore	307	4.1%	115	2.2%	422	3.3%
Pleasanton	236	3.2%	102	1.9%	338	2.6%
Castro Valley	204	2.7%	127	2.4%	331	2.6%
Union City	210	2.8%	84	1.6%	294	2.3%
Emeryville	151	2.0%	86	1.6%	237	1.9%
Dublin	164	2.2%	65	1.2%	229	1.8%
Newark	169	2.3%	38	0.7%	207	1.6%
San Lorenzo	99	1.3%	63	1.2%	162	1.3%
Albany	51	0.7%	24	0.5%	75	0.6%
Piedmont	18	0.2%	3	0.1%	21	0.2%
Sunol	7	0.1%	1	0.0%	8	0.1%
Total	**7,482**	**100.0%**	**5,312**	**100.0%**	**12,794**	**100.0%**